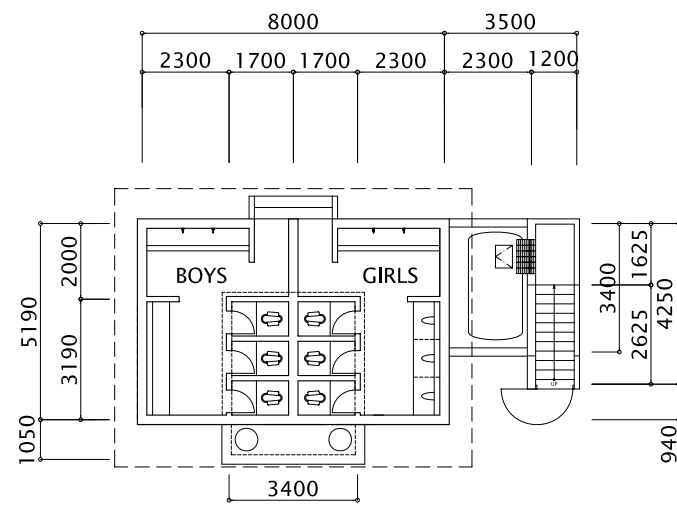
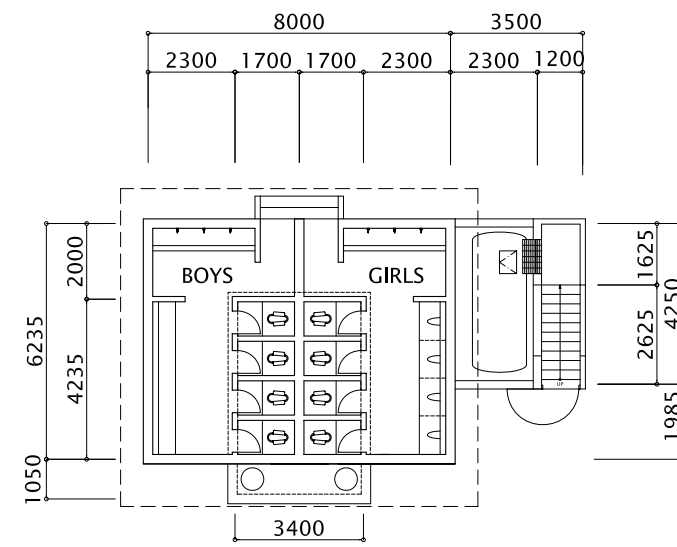


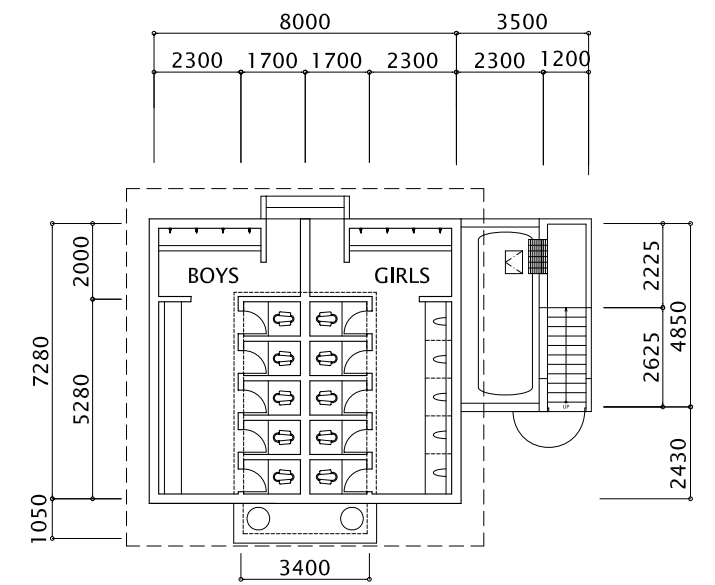
T-S TYPE PLAN



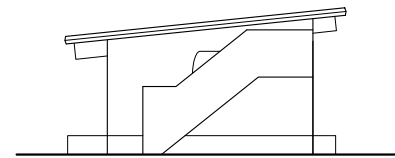
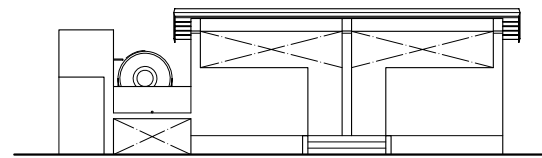
T-M TYPE PLAN



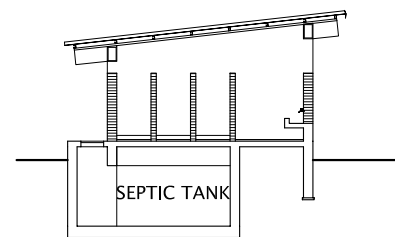
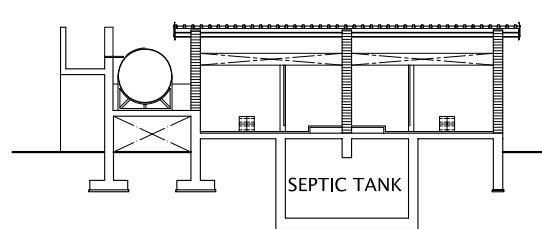
T-L TYPE PLAN



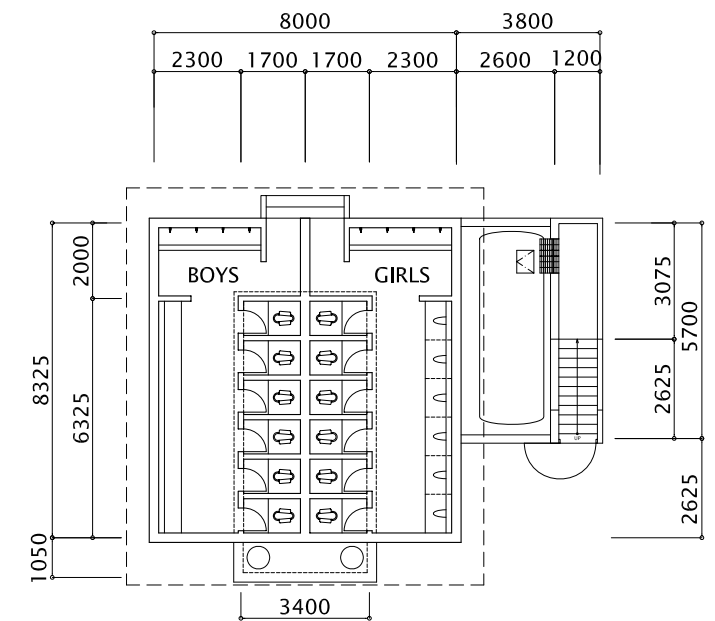
T-XL TYPE PLAN



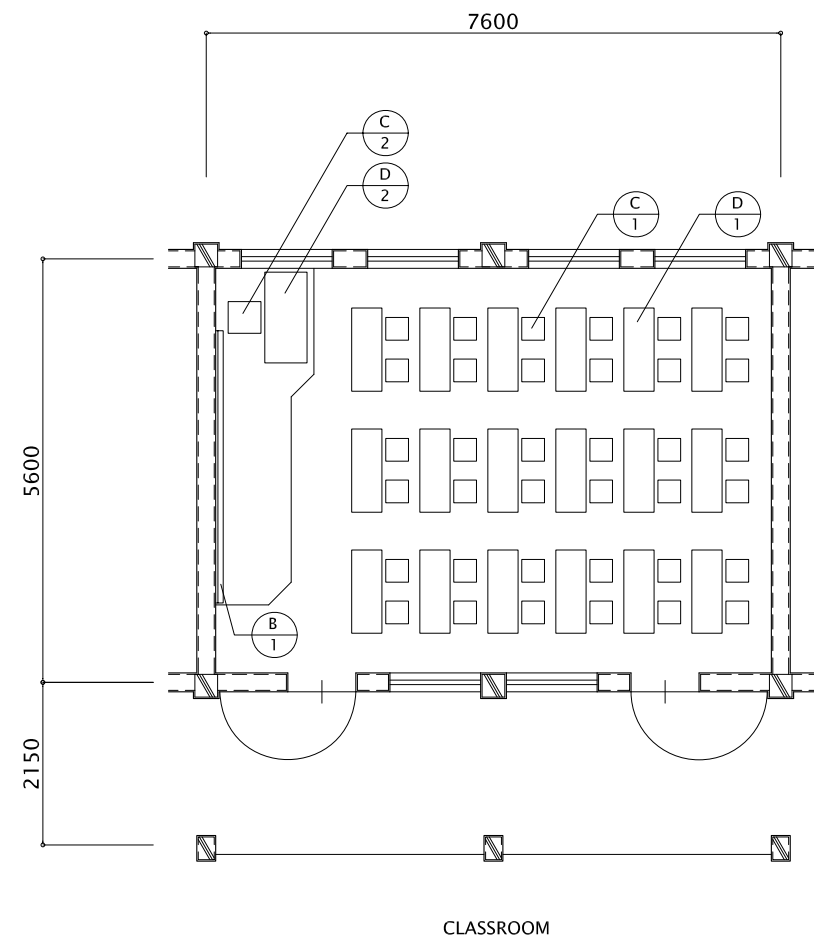
T-M TYPE ELEVATIONS



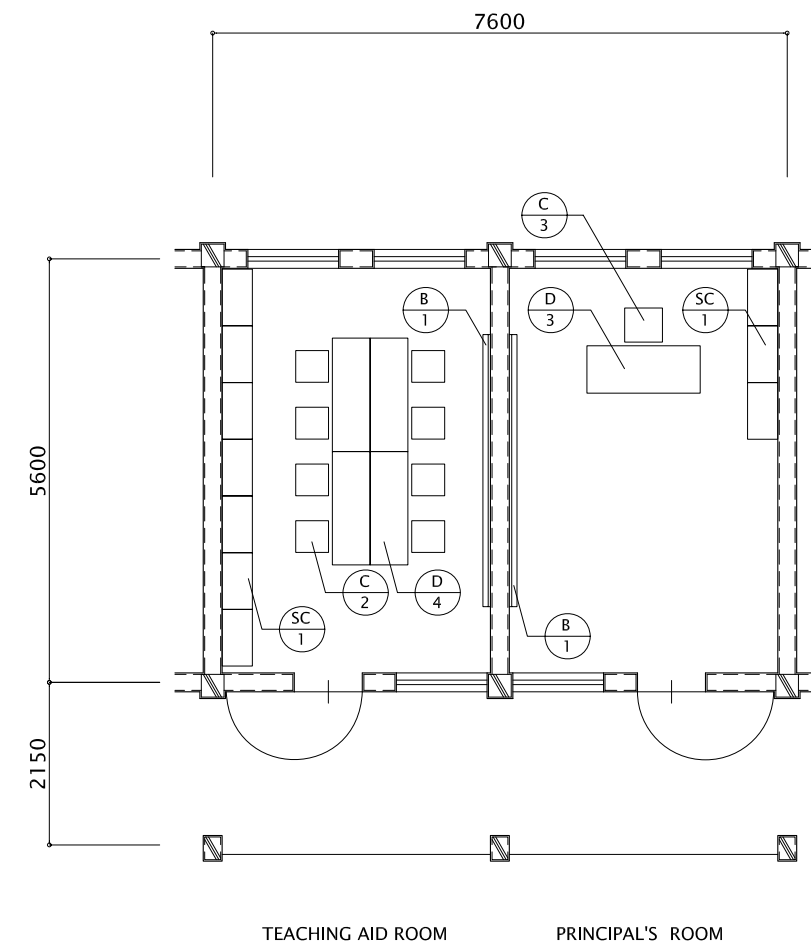
T-M TYPE SECTIONS



T-XXL TYPE PLAN



FURNITURE LAYOUT



FURNITURE SCHEDULE

LOCATION	SYMBOL	ITEM	DIMENSION	QUANTITY	REMARKS
CLASSROOM	(D 1)	STUDENT'S DESK (FOR 2 STUDENTS)	1100W×525(590)H×400D	18	SMALL DESK:LARGE DESK=1:2
	(D 2)	TEACHER'S DESK	1200W×750H×558D	1	
	(C 1)	STUDENT'S CHAIR	325(375)H	36	SMALL CHAIR:LARGE CHAIR=1:2
	(C 2)	TEACHER'S CHAIR	430H	1	
	(B 1)	BLACK BOARD	3600W×1200H	1	
PRINCIPAL'S ROOM	(D 3)	PRINCIPAL'S DESK	1500W×750H×625D	1	
	(C 3)	PRINCIPAL'S CHAIR	430H	1	
	(SC 1)	STORAGE CABINET	750W×1800H×400D	3	
	(B 1)	BLACK BOARD	3600W×1200H	1	
TEACHING AID ROOM	(D 4)	MEETING TABLE	1500W×750H×500D	4	
	(C 2)	TEACHER'S CHAIR	430H	8	
	(SC 1)	STORAGE CABINET	750W×1800H×400D	7	
	(B 1)	BLACK BOARD	3600W×1200H	1	

2-2-4 Implementation / Procurement Plan

2-2-4-1 Implementation / Procurement Policies

(1) Basic Matters for Project Implementation

The Project will be carried out in accordance with the Basic Design. After the review of the Basic Design by Japanese agencies related to the Project, an approval by the Cabinet of the Government of Japan is required for the Project implementation. After the approval, both countries will sign the Exchange of Notes for the Project. Then the Project will begin in accordance with the following principles:

- 1) The Project shall use the funds financed by the taxes of Japanese people and it will be implemented under the budgetary system of Japan.
- 2) The Government of Vietnam shall sign a contract agreement with a Japanese national consulting firm and entrust the firm assisting the Vietnamese side to select contractors for the Project construction and conducting construction supervision work for the Project construction.
- 3) The Government of Vietnam shall select a Japanese national prime contractor through competitive bidding with a pre-qualification evaluation process under the assistance of the above-mentioned Japanese consulting firm and sign an all-in contract agreement with the contractor.

(2) Structure for Project Implementation

MOET will take overall responsibility for the Project. The implementing organizations are the International Relations Department, Planning and Finance Department and Primary Education Department. At the Provincial level, DOETs of Tuyen Quang and Phu Tho will be in charge of actual contact with each Project school. At the school level, the principal will be the contact person.

(3) Use of Local Consultants and Contractors

For the sake of safe and smooth Project implementation and supervision at the Project sites scattered throughout two different provinces, local staff, who are well acquainted with the social and local construction conditions, should be employed as much as possible.

(4) Implementation Plans

The Project aims to construct 17 schools which are spread around two different provinces. Therefore, the project base is planned to be set in Hanoi and each provincial capital.

- 1) The construction plan should consider the availability of local laborers, construction methods and other related customs and practices of Vietnam;
- 2) A construction implementation plan that will need no re-scheduling due to the change of the school side's intentions should be made. This should be decided in advance through the holding of several meetings with persons in charge at each school;
- 3) As construction work will mostly be done on existing school properties, effects on school activities and the security of students will be sufficiently considered;
- 4) Adequate security should be ensured throughout the construction period to prevent problems like theft, etc. at the construction sites;
- 5) The detailed implementation schedule will be regularly reported on, to MOET, DOET, JICA Vietnam office, and Embassy of Japan during the construction period to assure smooth implementation of the Project.

2-2-4-2 Considerations on Implementation and Procurement

(1) General Conditions Regarding Local Construction

The Project Area is in the midst of an economic and social development stage. Construction industries and construction material related industries in the region are also in the developing stage. Thus, for the procurement of main construction materials, it is necessary to select those construction materials that are manufactured under careful quality control. In particular, it is not possible to procure ready-mixed concrete in the Project Area. Making of concrete at each construction site must be conducted under strict quality control. As for recruiting general laborers, there will be no problems at each construction site. However, skilled workers shall be recruited in Hanoi for securing necessary numbers and quality levels. As for subcontractors, the prime consultants for the Project shall transfer an organized construction supervision method to them.

(2) Considerations on Quality and Schedule Management

Because the number of Project schools and planned classrooms is quite large and the construction area is also wide, it is recommended not to begin construction at all

Project sites simultaneously, considering the capability of local subcontractors and efficiency of the construction. Project construction should proceed in stages by dividing the sites into several groups with each group starting its building construction in intermittent succession according to a sliding time scale. The sites with two-storied buildings should begin construction earlier than those with single-storied buildings because of the longer construction period required. Strict schedule control of work to be undertaken by the Vietnamese side is a key for smooth Project implementation. In particular, if site preparation work at a Project site is not adequately carried out on time, building construction cannot start. For this reason, it is absolutely necessary for the Vietnamese side to understand that their part of the site preparation work must be completed without delay.

2-2-4-3 Scope of Works

Table 2—9 shows the division of work between the Vietnamese and Japanese sides.

Table 2—9 Scope of Works

Work Item	Japanese side	Vietnamese side
1. Site clearing, cut and fill, and retaining walls before school building construction takes place		○
2. Removal/demolishing of existing facilities at school sites before school building construction takes place		○
3. Removal of rocks, obstructions, and trees at school sites, which affect the construction works, before school building construction takes place		○
4. Associated exterior works such as landscaping, fencing, and school gates		○
5. Preparation of access roads to Project sites before school building construction takes place		○
6. Construction of classrooms and toilets and associated equipment work	○	
7. Water supply work up to the cistern tanks (covered by Japanese side), if necessary		○
8. Electric power connection up to the integrating wattmeter		○

Figures 2-2 and 2-3 show the boundary of works between the Vietnamese and Japanese side for water supply work and electrical work respectively.

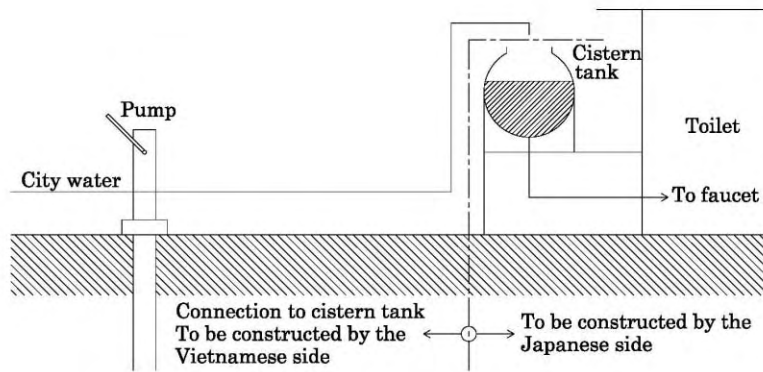


Figure 2-2 Border Line of Water Supply Work between Vietnamese and Japanese Sides

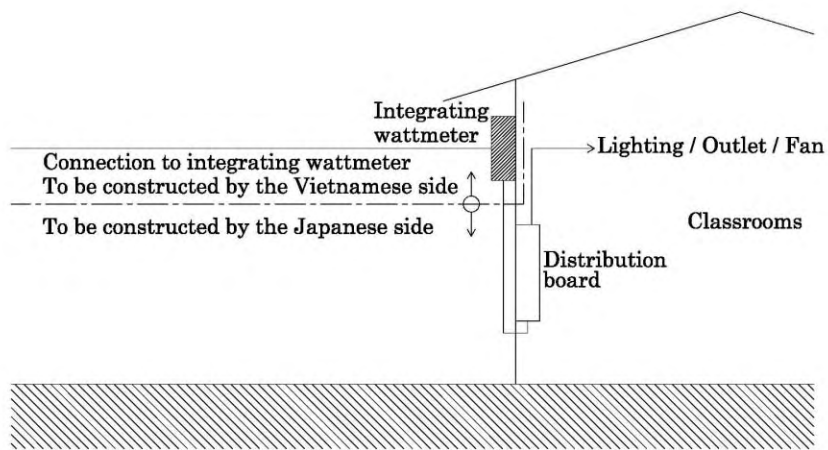


Figure 2-3 Scope of Electric works between Vietnamese and Japanese sides

2-2-4-4 Consultant Supervision

The Project's many construction sites are scattered over two provinces. In addition, most of the Project schools are located in areas which are far from the capitals of the

provinces. Thus, in order to sufficiently adhere to the required construction schedule and work quality, two types of supervision shall be conducted simultaneously: (1) General supervision - to be carried out in Japan with periodic travel to Vietnam, and (2) Site supervision - to be carried out by the resident architects or engineers.

(1) General Supervision

The Japanese Project Manager at the consulting firm's headquarters will oversee the overall construction schedules, make comprehensive technical judgments and support the resident architects or engineers in Vietnam in areas of technical knowledge that may be out of the expertise of the resident architects or engineers. The Japanese consultants involved in the detailed design of the Project will assist in this work.

(2) Supervision by the Resident Architects and Engineers

The resident architects and engineers who conduct construction supervision in Vietnam will be selected from the consultants involved in the detailed design of the Project. They will carry out the following tasks by instructing the local consultants:

1) Controlling the detailed construction schedule, 2) Attending the various tests such as slump tests, concrete compression tests, etc, 3) Checking, guiding and approving of shop drawings and working instruction 4) Approving construction materials, 5) General technical guidance to the contractors, 6) Conducting mid-term and final inspections, 7) Gathering information related to construction, 8) Preparing monthly construction supervision reports, 9) Reporting to the MOET/DOET from time to time, 10) Conducting construction committee meetings, 11) Confirming the progress of work to be undertaken by the Vietnamese side, 12) Reporting construction status to the Japanese Embassy and the JICA office in Vietnam, etc.

Under the resident Japanese architects or engineers, the local consultants will carry out construction supervision work. The number of Japanese consultants for the supervision is 1 (for 12months). The number of local consultants is 2.

The consultants' supervision offices shall be located in Hanoi due to its convenient access to all the Project sites in two provinces, and the Project sites near Hanoi shall be supervised by engineers from Hanoi, so that Project construction can be comprehensively managed. The contractors' construction offices shall also be located in Hanoi where the construction materials can be easily obtained. Figure 2-4 is the organization chart for construction supervision by the consultant and construction management by the contractor.

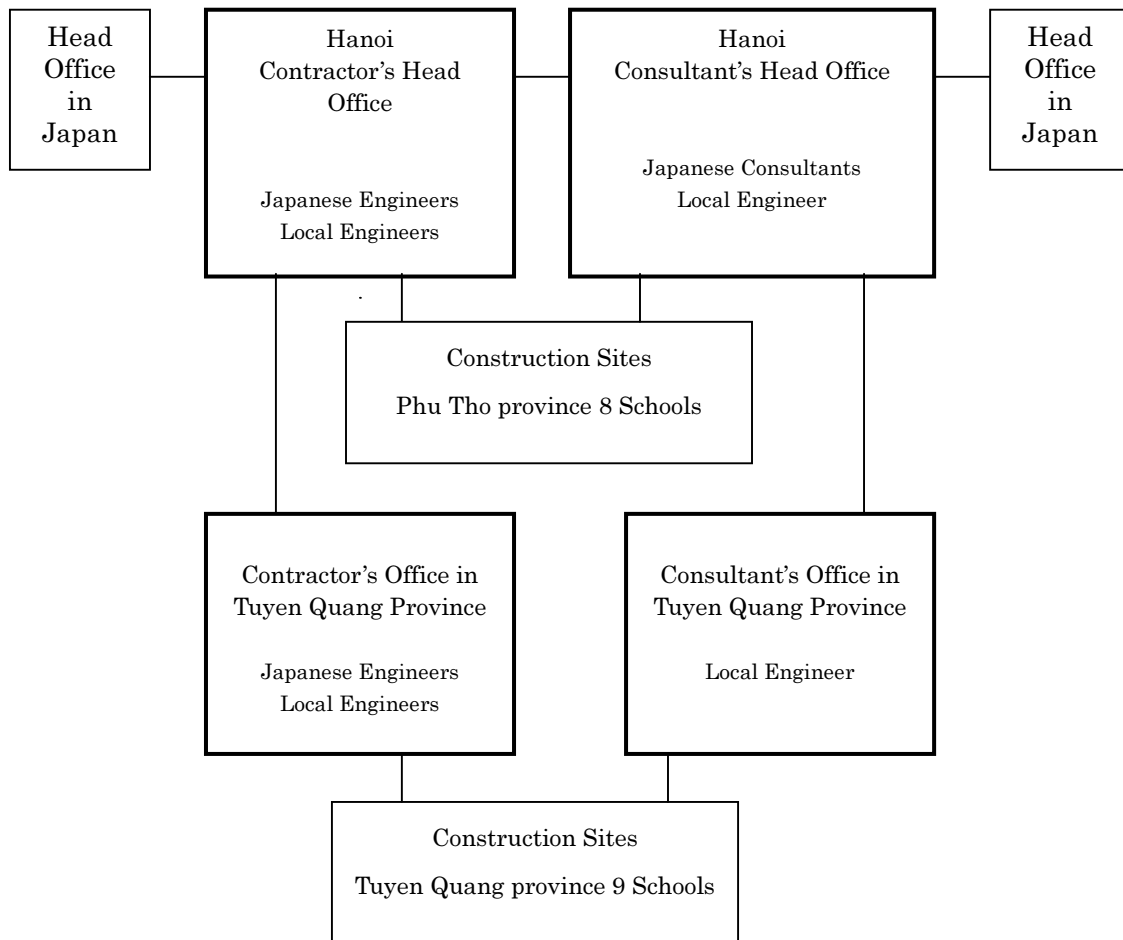


Figure 2-4 Project Construction Management Organization Chart

2-2-4-5 Quality Control Plan

Quality control for the Project's construction shall be based on those items specified in the design documents and the construction supervision plan. Quality control during the construction period includes: 1) Checking the shop drawings and construction plans and documents, 2) Evaluating the various samples of materials, 3) Conducting the various tests and, 4) Attending the various site inspections. Table 2-10 shows the major items of quality control during the structural works' stage of construction.

Table 2-10 Major Quality Control Items During Structural Work Stage

Work	QC Item	Method of Examination	Frequency of Examination
Earth Work	Confirmation of soil condition of finish grade	Observation	Once per site
Re-bar and Form Works	Re-bar material	Checking Mill sheets	Upon procurement
	Re-bar arrangement	Inspection for re-bar arrangement	Before concrete casting
	Form work	Inspection for form work	Before concrete casting
Concrete Work	Materials	Cement : Quality test results Aggregates : Sieve analysis test Water : Quality test result	At every batch plant
	Mixing	Trial mixing	At every batch plant
	Casting	Slump test, Concrete temperature measurement, Air content test, Chloride test	Upon concrete casting
	Concrete Strength	Compression test for test pieces	Once per concrete casting
Bricks	Materials and Capacity of factory	Factory inspection	Every factory
	Strength	Compression test	Every factory

As there are many tests at a large number of the Project sites, the highly-experienced Japanese architects or engineers may not be able to attend all of them. Because of this, the use of a checklist may be useful. A checklist for each job task, based on the construction supervision plan, should be prepared for each construction stage. For example, for the quality control of concrete works, the following checklists shall be provided:

- a) Checklists for confirming aggregates, cement, water quality and trial mixing tests either at a batch plant or at a construction site;
- b) Checklists for slump tests, air amount tests, test piece sampling, chloride tests and temperature measuring during concrete placing work;
- c) Checklists for the results of compression tests of test pieces at a public laboratory.

As for the works other than concrete works, either the consultants or contractors' site managers should conduct quality control by making the rounds at the construction sites or manufacturing plants and completing the checklists. Through the use of this

kind of checklist method, the quality of various materials, etc for construction can be uniformly controlled. As mentioned earlier, it is very effective for good quality control to have all the local consultants and contractors trained at model schools or building mock-ups so that everyone possesses the same knowledge, techniques and skill levels.

2-2-4-6 Procurement Plan

(1) Policies for Material and Equipment Procurement Plan

In this Project, all construction materials and educational equipment like furniture, should be procured locally for cost-reduction purposes and ease of maintenance of the Project facilities after implementation is complete.

(2) Plans for Transport and Storage of Materials

Most of the construction materials will be procured in Hanoi and transported and stored in the stockyard in Hanoi. Some of them will be transported to a stockyard in each province and they will be transported to each site by land transportation according to construction progress. The procurement and transportation plan of materials is shown in Figure 2-5.

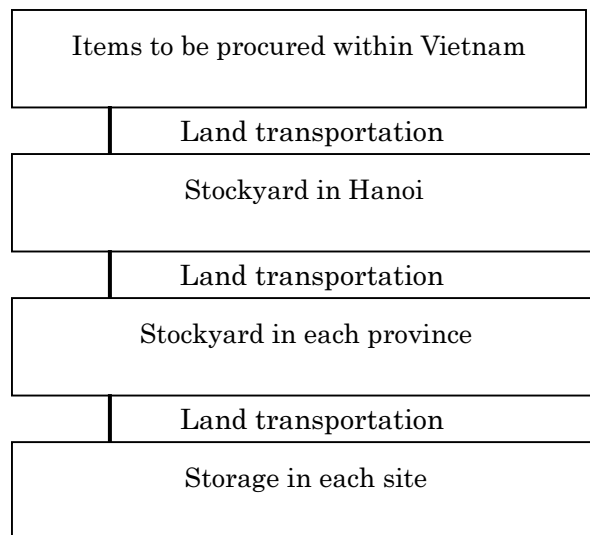


Figure 2-5 Transportation Plan for Procured Equipment and Material

2-2-4-7 Software Component Plan

Since the related personnel at the Project schools lack sufficient knowledge for

correct facility use and maintenance methods, proper maintenance activities have not been implemented. Considering this situation, the Project will introduce a software component in order that each Project school will utilize Project facilities in an effective and sustainable way. Targeting members of the school management committees at the Project schools, the following activities will be implemented: 1) workshops will be held to analyze current situations and problems regarding maintenance activities at each school and to raise awareness among participants; 2) guidelines will be produced for the effective use and maintenance of facilities and equipment; and 3) proper training and related activities regarding the use of these guidelines will be provided. (See Appendix A for details).

2-2-4-8 Implementation Schedule

Project implementation, which is within the framework of Japan's Grant Aid System, will become effective after the demarcation of work and other necessary procedures have been completed by the Government of Japan and the Government of Vietnam. The Project will commence following the signing of the E/N by the two countries. After the signing, the Project will be implemented in 3 steps for each stage: (1) Tender, (2) Procurement of materials, and (3) Construction. Approximately 12 months are required for the Project.

(1) Tender

The tender period includes announcement, qualification examination of companies, opening of the tender, tender results evaluation and the construction contract. The methods for determining the type of contract between the client (MOET) and the construction company, and the tender shall be decided in advance of the tender period through sufficient consultation. Approximately three months are required to complete all of the tender processes.

(2) Procurement and Transportation of Construction Materials and Equipment

Following the signing of the construction contract, preparation of shop drawings should be started immediately. Procurement of materials and equipment will start after the approval of the shop drawings. The delivery of the first equipment can be expected to arrive at the site about one month after the conclusion of the contract.

(3) Construction

After the signing of the contract, the Project sites shall be divided into several groups and the determination of when each group will start its building construction and in what order shall be decided. Since two-story buildings need a longer construction period, they should be included in the first group as much as possible. It takes about one month of preparation time after signing the contract before excavation of the ground can start. After completion of the building construction it will take one month for delivery of furniture and equipment to transfer to the sites and for the final inspection by the consultant to take place. It will take 12 months for each construction stage. The Project schedule is shown in Table 2-11.

Table 2-11 The Project Schedule

Stage \ Month	1	2	3	4	5	6	7	8	9	10	11	12	
Tender	Tender work (3.0M)												Total: 3.0M
Procurement & Construction	Preparation work												
	Earth work												
	Structural work												
	Finishing work												
	Manufacturing furniture												
	Delivery of Furniture												
	Inspection & Handover												
													Total: 12.0M

2-3 Obligations of Recipient Country

The purpose of Japanese Grant Aid is to provide financial assistance for countries making their own self-effort for development. As a basic principle, the Government of Japan requests recipient countries to share obligations of the Project, and this principle applies equally to any recipient country in the world.

Once the Government of Japan decides to provide Grant Aid for the implementation of the Project, the Government of Vietnam will undertake the following obligations:

- (1) Provide the Japanese side with information and data pertinent to the Project
- (2) Prepare necessary land for the Project and obtain rights for MOET to construct the Project facilities;
- (3) Arrange retaining walls, conduct filling of the land, make ground, remove existing objects, cut or relocate the trees, and conduct other necessary construction work prior to the start of construction.

Table 2– 12 List of the Preparation Works

Name of School		Item
Tuyen Quang province		
TQ-2	Vinh Loc	Removal of existing buildings Filling and retaining wall construction Removal of pavement Relocation of fence
TQ-3	Bac Muc	Cutting, filling and grade of the land
TQ-5s	Thuong Am (Sub School)	Removal of existing buildings Removal of trees Cutting and grade Improvement of access road
TQ-6	Phan Thiet	Removal of existing buildings Removal of trees Removal of pavement
TQ-7	Thai Binh	Filling of the land
TQ-8	Son Nam	Relocation of electric line and posts Removal of trees Filling of the land
TQ-10s	Xuan Quang (Sub School)	Removal of existing buildings Removal of trees Cutting of the land, retaining wall and ditch construction Relocation of school gate
TQ-14	Phuc Thinh	Relocation of existing buildings Removal of pavement Removal of existing buildings Removal of trees
TQ-17s	Dang Chau (Sub School)	Removal of existing buildings Improvement of access road Cutting and filling of the land
Phu Tho province		
PT-4	Tieu Son	Relocation of temporary building
PT-5	Det (Dinh Tien)	Relocation of basketball facilities
PT-6	Van Lung	Removal of existing buildings
PT-8	Co Tiet	None
PT-10	Dong Xuan	Removal of existing buildings
PT-11	Trung Nghia	Removal of trees Relocation of electric line and posts
PT-15	Vo Mieu 2	Removal of trees Relocation of badminton facilities
PT-20	Ha Thach	Cutting and grade of the land

- (4) Connect the electric power up to the integrating wattmeter, and provide and connect the water source to the toilet cistern tank before completion of construction. In addition, provide all necessary electric water pumps to the sites.
- (5) Undertake landscaping, construction of boundary walls, and other incidental outdoor work after the completion of the construction, if necessary

- (6) Secure teachers and administrative staff members, as well as a sufficient amount of funds necessary for operating and maintaining completed Project facilities; including equipment that is to be procured by the grant aid.
- (7) Bear commissions and/or fees for banking services based on the banking arrangement.
- (8) Ensure the expeditious unloading and customs entry of Project materials and equipment purchased by grant aid at the port of disembarkation. Also, ensure all grant aid materials are exempt from taxes and prompt inland transportation of those materials.
- (9) Exempt all Japanese companies engaged in the Project from customs duties, domestic taxes, and other levies in Vietnam that may be imposed on products and services which come under the verified contracts. Especially, allocate the necessary budget for Value Added Taxes in advance to pay the equivalent amount for all Japanese juridical and physical nationals engaged in the Project.
- (10) Provide every convenience to all Japanese nationals engaged in the Project when they enter into or stay in Vietnam to perform work which comes under the verified contracts.
- (11) Give permission, approval, and other authorization that may be necessary for the project implementation.
- (12) Adequately and effectively use and maintain the Project facilities under the responsibility of MOET.
- (13) Bear all costs necessary for the implementation of the Project, including costs for land preparation, access road construction, infrastructure line connection, and other incidental work, but excluding those cost that are to be borne by the Japanese side.
- (14) Provide expeditious assistance, decisions, and judgment whenever requested by consultants for smooth project implementation.

2-4 Project Operation and Maintenance Plan

(1) Operational Plan

In Vietnam, there is a system for assigning one teacher to one class. In the case of a double-shift system, different teachers are assigned for the morning classes and the afternoon classes. Thus, even if new classrooms are constructed by the Project to conduct full-day schooling, there will be no need to assign new teachers. For this reason, it is considered that measures for assigning teachers to new classrooms would not be required.

(2) Maintenance Plan

School facilities' operation and maintenance activities at each school are conducted by the school management committee that is comprised of the principal, vice principal, representative of teachers, parents of students and area residents under the supervision of BOET. As for actual repair and maintenance work, simple work, such as gardening, repairing of desks and chairs and painting walls, is carried out either by volunteers recruited by the school management committee or outside contractors. Relatively large-scale work, such as replacement of roof trusses and floor replacement, is financed by the school-facility operation maintenance funds that are reserved by the People's Committee. The reserved funds are originally collected as school operation and maintenance fees from the parents of students. The amount of the fee is in the range of 30,000 to 80,000 VND per student in a year (approximately 240 to 650yen). As for the cleaning of school facilities, students and teachers conduct cleaning work at many Project schools. However, in urban areas there are some schools that farm out cleaning work to outside contractors.

As mentioned above, school facility operation and maintenance systems are already established at most Project schools. Thus, there will be no need to establish a new organization for facility operation and maintenance after completing Project facilities. However, through site surveys, the Study Team learned that the existing facilities at Project schools were not necessarily operated and maintained adequately and that the operation and maintenance methods were not necessarily suitable. For this reason, it is recommended to introduce software components for the purpose of raising the awareness of the people related to school facility maintenance, mainly members of the school management committee, and to conduct workshops regarding appropriate maintenance methods and the use of the school facility.

2-5 Project Cost Estimation

2-5-1 Project Cost

The total amount of the project cost needed for implementing the Grant Aid Project is approximately 514.9 Million Japanese Yen. According to the conditions of the cost estimate shown below in section (3), the previously mentioned details of expenses based on the respective shares borne by Japan and Vietnam are calculated as below. However, the following estimated project cost may not be considered the final Grant Aid project cost as that is limited based on the Exchange of Notes. The cost estimate is provisional and will be further examined by the Government of Japan for final approval of the Grant.

(1) Expense borne by the Japanese side

Approx. 514.9 Million Japanese Yen

① Tuyen Quang Province: 9 Schools, 53 Classrooms (Total Floor Area 4,203.79 m²)

Item		Rough Project Expenses (Million Japanese Yen)	
Facility	Classroom Building	147.8	177.9
	Toilet Building	21.6	
	Furniture	8.5	
Detail Design / Const. Supervision / Technical Training		17.6	

Rough Project Expenses (Subtotal) Approx. 195.5 M.J.Y.

② Phu Tho Province: 8 Schools, 87 Classrooms (Total Floor Area 6,863.10 m²)

Item		Rough Project Expenses (Million Japanese Yen)	
Facility	Classroom Building	247.8	290.6
	Toilet Building	28.8	
	Furniture	14.0	
Detail Design / Const. Supervision / Technical Training		28.8	

Rough Project Expenses (Subtotal) Approx. 319.4 M.J.Y.

(2) Expense borne by the Vietnamese side:

786.3 Million VND (approx. 5.85 million Japanese yen).

①	Construction of shoring and retaining wall	547.2 Million VND	4.07 M.J.Y
②	Cutting, filling and reclamation of land	176.3 Million VND	1.31M.J.Y.
③	Demolition of all concerned existing buildings in the proposed construction site	7.7 Million VND	0.06 M.J.Y
④	Removal of existing obstacles, such as foundations, concrete structures, pavement, and others	1.7 Million VND	0.01 M.J.Y.
⑤	Demolition and removal of existing trees	0.7 Million VND	0.01 M.J.Y
⑥	Electrical Connection Work	44.3 Million VND	0.33 M.J.Y.
⑦	Supply Water Connection Work	8.4 Million VND	0.06 M.J.Y
	<u>Total</u>	<u>786.3 Million VND</u>	<u>5.85M.J.Y.</u>

The Vietnamese side works and costs calculated are shown in the list above. The fiscal year in Vietnam is from January to December, and the necessary budgets will be made by the Planning and Finance Department of MOET.

(3) Condition of Cost Estimate

①	Period of cost estimate	December, 2005
②	Currency Exchange Rate	1 US\$=118.26 Japanese Yen 1 US\$=15,902.8 VND 1 VND=0.00744 Japanese Yen
③	Period of Execution	The Project design work and construction will be implemented in three phases. The time periods for tender, construction and procurement, are shown in the Project Implementation Schedule.
④	Others	This Project shall be carried out under the system of the Grant Aid of the Japanese government.

2-5-2 Operation and Maintenance Costs

After the Project implementation, additional operation and maintenance costs would be necessary.

(1) Operating Costs

Operating costs (personnel expenses, electric fees, water fees and sewage disposal costs) will be estimated as follows.

1) Personnel Expenses

As stated earlier, additional employment would not be necessary.

2) Electric Fees, Water Fees and Sewage Disposal Costs

a) Electric Fees

The total number of classrooms in these schools is 140 and total numbers of principal's rooms and teaching aid rooms is 13. The electrical-related equipment in this Project covers lighting systems, wall outlets and fans. The length of usage depends on climate. Average electric consumption per classroom will be estimated at 723 kwh and principal's rooms and teaching aid rooms will be estimated at 921 kwh each. Total consumption will be estimated 114,639 kwh and the total fees would be estimated at 102,601,905 VND (approximately 0.74 million JPY). In this Project, water supply pumps will be provided by the Vietnamese side, if necessary. Therefore, electric fees related to water supply pump usage will be added to the above mentioned figure.

Table 2-13 Electric usage amount and fee for each province (per year)

	Classrooms		Principal's and Teaching aid rooms		Total Consumption (kwh)	Total costs	
	number	consumption (kwh)	number	consumption (kwh)		(VND)	(million JPY)
Tuyen Quang Province	53	38,319	5	4,605	42,924	38,416,980	0.28
Phu Tho Province	87	62,901	8	7,368	70,269	62,890,755	0.45
Total	140	101,220	13	11,973	113,193	101,307,735	0.73

b) Water Fees

Schools that are connected to the public water supply system will have to pay additional water fees. Four schools (41 classrooms / 1,435 students) are now being connected to the public water supply system. Estimated from the amount of water used per student and the present water fee, the additional fee after the Project implementation would be $502t \times 4,000 \text{ VND/t} = 2,009,000 \text{ VND}$ (approximately 14,000JPY).

Table 2-14 Water fee for each province (per year)

	Water Consumption (t)	Water Fee	
		(VND)	(JPY)
Tuyen Quang Province	343	1,372,000	9,800
Phu Tho Province	159	636,000	4,600
Total	502	2,008,000	14,400

c) Sewage Disposal

There are no Project schools that will connect to the public sewage disposal system, so no additional fee for the sewage disposal cost shall be considered.

(2) Maintenance Costs

Maintenances costs can be divided into a) periodic expenses such as painting costs and b) irregular expenses such as minor maintenance (repairing of jalousie windows and doors). In general, maintenance fees are estimated at 0.6 to 1.4 % per year of the entire construction costs. In this Project, maintenance cost is estimated as 0.6% per year, as all the Project buildings simply require easy maintenance work.

$$45,908,587,441 \text{ VND} \times 0.6\% / \text{year} =$$

$$\text{Approx. } 275,451,524 \text{ VND} / \text{year} (\text{Approx. } 2.05 \text{ million JPY})$$

(3) Total Operation and Maintenance Costs

Operation and Maintenance Costs are estimated according to the management costs of each province with regard to MOET primary education policy for the 2004 academic year, and shown in table 2-15. After-Project maintenance cost increases are calculated to be approximately 6.9 to 16.8% a year and it is considered reasonable and reliable for future budget considerations as current expenses are increasing every year as well.

Table 2-15 Operation Budget for Primary Education in each Projected Province and Estimated Increase in Operation Cost by the Project

	Budget for Primary Education in Year 2002 (Million VND)	Estimated Increase by the Project (Million VND)	Increase Ratio
Tuyen Quang Province	853 (Approx.6M.J.Y.)	144 (Approx.1.07M.J.Y.)	16.8%
Phu Tho Province	3,400 (Approx.2.5M.J.Y.)	234 (Approx.1.74M.J.Y.)	6.9%
Total	4,253 (Approx.3.1M.J.Y.)	378 (Approx.2.81M.J.Y.)	9.0%

Chapter 3 Project Evaluation and Recommendations

Chapter 3 Project Evaluation and Recommendations

3-1 Effects of the Project

(1) Direct Effects

① Improvement of the Study Environment

Through construction of the 140 classrooms by the Project, all the existing decrepit and temporary classroom buildings, which are approximately 26% of all the classrooms, will be replaced and the Project schools will be provided with the capacity to hold a larger number of students. With the reduction of the classroom population from 95 students to 34 students per room¹, the learning environment of the classrooms will be better.

② Implementation of the Full-Day School Program

Because of the improvement of classroom shortages through the implementation of the Project, the schools, which are now forced to operate under a double-shift program, will be able to change their operation to a full-day school program. Therefore, the ratio² of classrooms capable of implementing the full-day school program will be increased from 36% to 104%.

③ Improvement of the Sanitary Environment

The Project will provide well-equipped toilet facilities with the number and sizes based on the number of classrooms to be built. Thus, the shortage of toilet facilities as well as the general sanitary environment shall be markedly improved.

④ Acquiring Skills and Knowledge for Proper Facility Maintenance and Management

By introducing the Software Component, each Project school will understand the importance of the proper maintenance of facilities and acquire the basic skills and knowledge for such maintenance. Furthermore, the appropriate implementation of the maintenance activities enables sustainable use of the existing facilities as well as the Project facilities, decreasing the maintenance cost in the long run.

¹ Number of Students per Classroom = Total Number of Students divided by Number of Usable Classrooms

² Classroom Ratio capable for the Full-Day School Program: Total Number of Classrooms divided by Appropriate Number of Class

(2) Indirect Effect

① Use of the Facilities by the Community

The Project facilities will be used not only for primary education but also for social educational activities such as adult education or literacy education, as well as for non-educational purposes such as community activities. In this way, the Project facilities will greatly contribute to the surrounding communities.

3-2 Recommendations

In conclusion, the Project is highly expected to bring many positive benefits as mentioned as well as to contribute to the improvement of Basic Human Needs of the society; thus, the implementation of the Project through the Japanese grant aid scheme is deemed worthy and meaningful. If the items mentioned below are improved, this Project will be implemented more smoothly, and thus more effectively contribute to improving the general educational environment.

① Approach to the Full-Day school Program

The current level of student attendance in the primary schools is quite high in Vietnam. However, after the adoption of the full-day school program, which will take a large amount of the students' time, may lead many students in the farming villages and lower income families to encounter difficulty attending school. This causes serious concern as it might widen the education-opportunity gap between the social classes. Thus, in order to prevent such problems from happening, the Vietnamese side is well advised to effectively eliminate any possible negative effect which the implementation of the full-day school program might cause.

In order to smoothly introduce and fully establish the acceptance of the new full-day school system in the schools, it is necessary, in addition to the alleviation of classroom shortages by the Project, to obtain the understanding from students, parents and the community about the purpose and goals of the full-day school program system. Furthermore, at the provincial and school level, it would be necessary to develop organizations related to the introduction of the full-day schooling system by examining school operation and conducting publicity activities for all related people.

② Implementation of Proper Maintenance Activities

Currently, school maintenance activities are not being carried out in an effective or systematic way, and also, proper preventative maintenance procedures for building facilities are not being implemented in any periodic fashion. When any problems arise, it seems that only temporary measures are taken to solve them. However, for the continuous and permanent use of both the existing and Project school facilities, it is absolutely essential that these kinds of activities be performed appropriately. In order to achieve and support such activities, the schools need to be well organized, the partnerships between the schools and their surrounding communities need to be promoted, and the awareness of all the related people needs to be raised.

③ Concern Regarding the School Construction Done by Vietnam

Several efforts to construct classrooms and improve classroom shortages are being made by the local people in conjunction with the People's Committees. In order for the Vietnamese side to best implement all work done for facility improvement on its own, an accurate forecast and analysis needs to be made in regards to the number of students attending school in the future. Moreover, the country of Vietnam needs to recognize and to fully acknowledge such voluntary effort by the local people and their communities as well as the close communication with the Bureau of Education and Training and the Department of Education and Training. In summary, the Vietnamese side needs to pay more attention to maintaining a high level of coordination of any and all school development projects that donors may bring, including this Project.

Appendices

1. Member List of the Study Team

Implementation Review Study Team (December 7, 2005 ~ December 24, 2005)

Name	Job Title	Organization
Mr. Fumio KIKUCHI	Leader	Resident Representative JICA Vietnam Office
Mr. Hiroyuki YOSHIZAWA	Chief Consultant / Architectural Planning	Mohri, Architect & Associates, Inc.
Mr. Toshiyuki TAKAHASHI	Architectural Design I	Mohri, Architect & Associates, Inc.
Mr. Katsumi HAYASHI	Structural Design	Mohri, Architect & Associates, Inc.

2. Study Schedule

Date			Official Members	a	b	c
				Chief Consultant/ Architectural Planning	Structural Design	Architectural Design 1
Hiroyuki Yoshizawa	Katsumi Hayashi	Toshiyuki Takahashi				
			18 days	18 days	10 days	
1	7-Dec	Wed		Tokyo 9:50→(via HongKong)→15:55 Hanoi (JL731) (VN791)		
2	8-Dec	Thu		Embassy of Japan・JICA Office Discussion with MOET		
3	9-Dec	Fri		Courtesy Call to DOET Pho Tho Province Site Inspection: PT-5 (Det), PT-8 (Co Thiet)		Tokyo 18:05→22:20 Hanoi (JL751)
4	10-Dec	Sat		Site Inspection: PT-11 (Trung Nghia), PT-15 (Vo Mieu 2)		
5	11-Dec	Sun		Internal Meeting / Data Analysis		
6	12-Dec	Mon		Site Inspection: PT-6 (Van Lung), PT-20 (Ha Thach)	Architectural and Procurement Survey	
7	13-Dec	Tue		Site Inspection: PT-4 (Tieu Son), PT-10 (Dong Xuan) Site Inspection: PT-16 (Thanh Van 2)	Architectural and Procurement Survey	
8	14-Dec	Wed		Courtesy Call to DOET Tuyen Quang Province Site Inspection: TQ-6 (Phan Thiet), TQ-7 (Thai Binh)		
9	15-Dec	Thu		Site Inspection: TQ-2 (Vinh Loc), TQ-10S (Lang Lac satellite school Xuan Quang), TQ-14 (Phuc Thinh)		
10	16-Dec	Fri		Site Inspection: TQ-8 (Son Nam), TQ-17S (Lang Ca satellite school Dang Chau), TQ-5S (Dong Van satellite school Thuong Am)	Architectural and Procurement Survey	
11	17-Dec	Sat		Site Inspection: TQ-3 (Bac Muc) Report to DOET Tuyen Quang and Phu Tho	Architectural and Procurement Survey	
12	18-Dec	Sun		Internal Meeting / Data Analysis		Hanoi 0:10→6:40 Tokyo (JL5136)
13	19-Dec	Mon		Site Visit to Stage 1 and Stage 2		
14	20-Dec	Tue		Discussion with MOET, Meeting with JICA Signing of the agreement for soil investigation		
15	21-Dec	Wed		Architectural and Procurement Survey		
16	22-Dec	Thu		Report to MOET and JICA		
17	23-Dec	Fri		Architectural and Procurement Survey		
18	24-Dec	Sat		Hanoi 0:10→6:40 Tokyo (JL5136)		

3. List of Parties Concerned in the Recipient Country

Ministry of Education and Training

Mr. Trinh Quoc Thai	Director of Primary Education Dept.
Mr. Tran Duy Tao	Vice Director of Planning and Finance Dept.
Mr. Nguyen Trong Nghia	Expert of Planning and Finance Dept.

Tuyen Quang Province, Department of Education and Training

Mrs. Ngo Thuc Lam	Director
Mr. Hoang Van Thinh	Vice Director
Mr. Ngo Ba Nhuong	Director of Planning and Finance Div.
Mr. Tran Ngoc Rinh	Expert of Planning and Finance Div.

Phu Tho Province, Department of Education and Training

Mr. Pham Van Lan	Director
Mrs. Nguyen Thi Thanh Chung	Vice Director
Mr. Vu Van Hien	Director of Administration Div.
Mr. Pham Hong Thao	Director of Planning and Finance Div.
Mr. Nguyen Van Phuc	Director of Personnel Div.

Embassy of Japan in Vietnam

Mr. Takuya Takigawa	Second Secretary
---------------------	------------------

JICA Vietnam Office

Mr. Fumio Kikuchi	Resident Representative
Ms. Sayaka Nakamura	Deputy Resident Representative

MINUTES OF DISCUSSIONS
ON THE IMPLEMENTATION REVIEW STUDY
ON THE PROJECT FOR
IMPROVEMENT OF FACILITIES OF PRIMARY SCHOOLS
IN THE NORTHERN MOUNTAIN REGION (PHASE II)
IN
THE SOCIALIST REPUBLIC OF VIET NAM

In September 2003, JICA submitted the Basic Design Study Report on the Project for Improvement of Facilities of Primary Schools in the Northern Mountain Region (Phase II) (hereinafter referred to as "the Project") to the Government of Japan. Then the 1st and 2nd stage were implemented as schedule, but the 3rd stage was postponed the implementation in 2005.

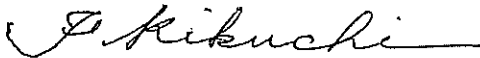
In response to a request from the Government of Vietnam for the realization of the Project, the Government of Japan decided to conduct a Implementation Review Study on the Project for the cabinet approval and entrusted the study to the Japan International Cooperation Agency (hereinafter referred to as "JICA").

JICA sent to Vietnam the Implementation Review Study Team (hereinafter referred to as "the Team"), which is headed by Mr. Fumio Kikuchi, Resident Representative, JICA Vietnam Office, and is scheduled to stay in the country from December 7, 2005 to December 24, 2005.

The Team held discussions with the officials concerned of the Government of Vietnam and conducted a field survey at the study area.

In the course of discussions and field survey, both parties confirmed the main items described on the attached sheets. The Team will proceed to further works and prepare the Implementation Review Study Report.

Hanoi, December 20, 2005



Mr. Fumio Kikuchi
Leader
Implementation Review Study Team
Japan International Cooperation Agency



Mr. Tran Duy Tao
Vice Director of Planning and Finance
Department
Deputy Head of Project Steering
Committee
Ministry of Education and Training
The Socialist Republic of Viet Nam

ATTACHMENT

1. Objective of the Project

The objective of the Project is to improve the educational environment of primary schools in 2 northern provinces (Tuyen Quang, Phu Tho) through reconstruction and expansion of school buildings and provision of educational equipment.

2. Project Areas

The Project areas are Tuyen Quang and Phu Tho provinces.

3. Responsible and Implementing Organization

3-1. The responsible organization is the Ministry of Education and Training (hereinafter referred to as "MOET").

3-2. The implementing organizations are the International Relations Department and Planning and Finance Department of MOET. Primary Education Department acts as the coordinator.

3-3. The organization charts of the above organizations are attached as Annex-1.

4. Items requested by the Government of Vietnam

After discussions with the Team, the items described in Annex-2 were finally requested by the Vietnamese side. JICA will assess the appropriateness of the request and will recommend to the Government of Japan for approval.

5. Japan's Grant Aid Scheme

5-1. The Vietnamese side understands the Japan's Grant Aid Scheme explained by the Team, as described in Annex-3.

5-2. The Vietnamese side will take the necessary measures, as described in Annex-4, for smooth implementation of the Project, as a condition for the Japan's Grant Aid to be implemented.

6. Schedule of the Study

JICA will prepare the final report and send it to the Government of Vietnam by April 2006.



7. Other Relevant Issues

7-1. Principle of the Study

The schools, the components and the number of facilities and equipment covered by the Project will not be changed from the Basic Design Report unless their needs have become less compared to the assumption in the Basic Design Report.

7-2. Modification of the Design requested by the Vietnamese Side

The Vietnamese side requested to the Team the modification of the design of facilities as follows. The contents of the request will be examined by the Japanese side and the final decision on this matter will be made by the Japanese side during further study in Japan.

- 1) To adjust building layout plan and / or scale based on the newly constructed building by the own effort and / or change of the existing site condition.
- 2) To consider demolition of the over aged and / or damaged buildings in evaluating the appropriateness of the items requested by the Vietnamese side.

However, the contents covered by the Project will be finalized after further study in Japan.

7-3. Site Preparation Works to be conducted by the Vietnamese Side

The Vietnamese side agreed that the timely completion of the site preparation works described in Annex-5 would be required. The Vietnamese side assured to complete the site preparation works before the commencement of the building construction works.

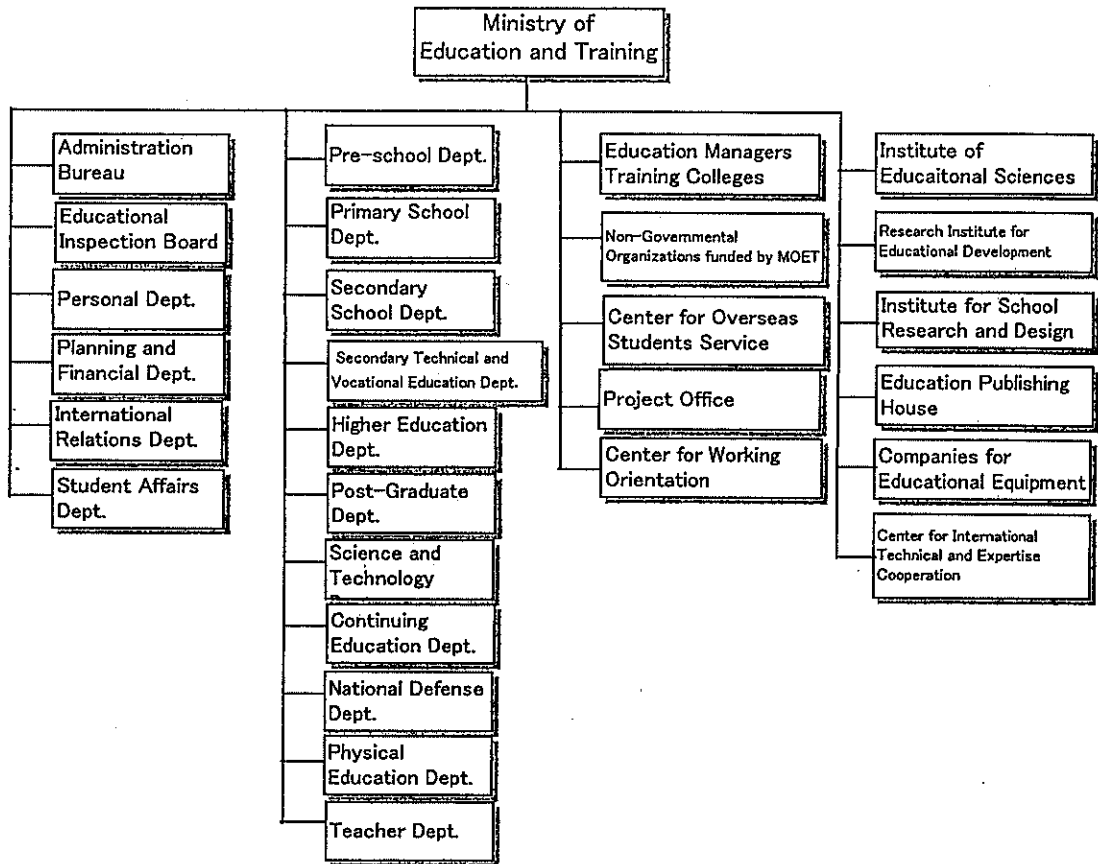
7-4. Responsibility of the Results of the Study

The Vietnamese side shall be responsible for the results of the execution of the Project on the basis of all documents and drawings prepared as a result of the Study.

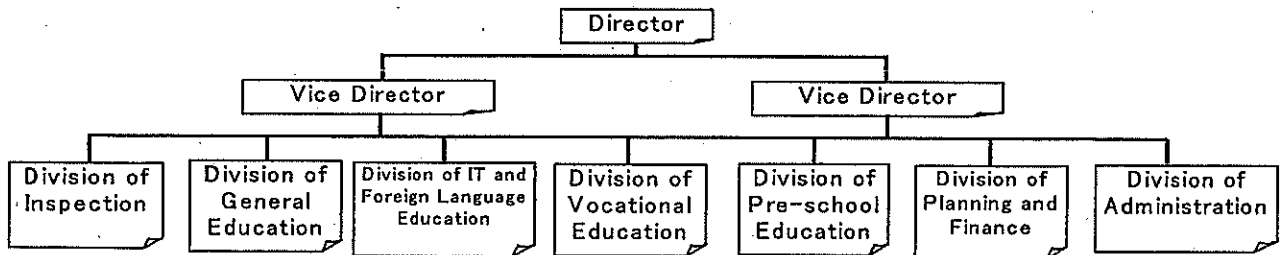
Annex-1	Organization chart of MOET
Annex-2	Major items requested by the Government of Vietnam
Annex-3	The Japan's Grant Aid Scheme
Annex-4	Major undertakings to be taken by each government
Annex-5	Site Preparation Works to be conducted by the Vietnamese Side

Annex -1: Organization chart of MOET

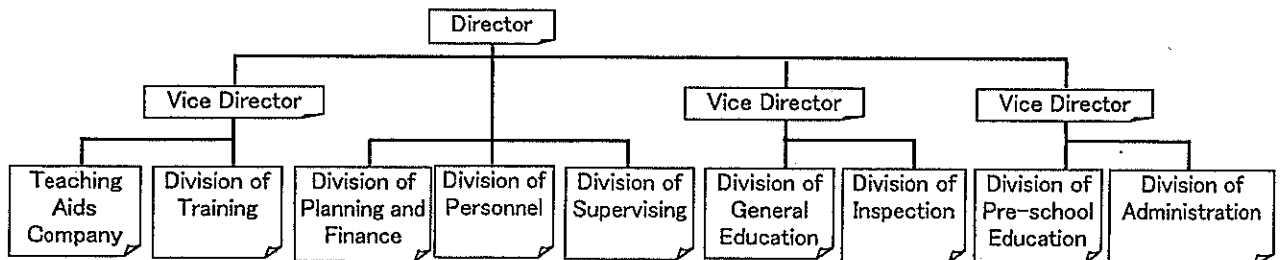
Ministry of Education and Training



DOET Tuyen Quang Province



DOET Phu Tho Province



act

Annex -2: Major items requested by the Government of Vietnam

No.	School name	Building Type	No. of Classrooms	No. of Principal's Rooms	No. of Teaching Aid Rooms	Toilets	Furniture	Software Component
Tuyen Quang Province								
TQ-2	Vinh Loc	1 story	5		1	o	o	o
TQ-3	Bac Muc	2 stories	11	1	1	o	o	o
TQ-5s	Thuong Am	1 story	3			o	o	o
TQ-6	Phan Thiet	2 stories × 2 buildings	12			o	o	o
TQ-7	Thai Binh	1 story	4	1	1	o	o	o
TQ-8	Son Nam	1 story × 2 buildings	7			o	o	o
TQ-10s	Xuan Quang	1 story	4			o	o	o
TQ-14	Phuc Thinh	1 story	5			o	o	o
TQ-17s	Dang Chau	1 story	3			o	o	o
Sub Total	9 Schools		54	2	3			
Pho Tho Province								
PT-4	Tieu Son	1 story	6			o	o	o
PT-5	Det	1 story + 2 stories	13	1	1	o	o	o
PT-6	Van Lung	2 stories	10			o	o	o
PT-8	Co Tiet	2 stories	11	1	1	o	o	o
PT-10	Dong Xuan	2 stories	9	1	1	o	o	o
PT-11	Trung Nghia	1 story	5			o	o	o
PT-15	Vo Mieu 2	1 story	4			o	o	o
PT-16	Thanh Van	1 story	3			o	o	o
PT-20	Ha Thach	2 stories × 3 buildings	25	1	1	o	o	o
Sub Total	9 Schools		86	4	4			
Total	18 Schools		140	6	7			

del

Annex -3: The Japan's Grant Aid Scheme

The Grant Aid Program provides a recipient country 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. Grant Aid is not supplied through the donation of materials as such.

(1) Grant Aid Procedure

1) Japan's Grant Aid Program is executed through the following procedures.

- Application (Request made by a recipient country)
- Study (Basic 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)

2) Firstly, the application or request for a Grant Aid project submitted by a recipient country is examined by the Government of Japan (Ministry of Foreign Affairs) to determine whether or not it is eligible for Grant Aid. If the request is deemed appropriate, the Government of Japan assigns JICA to conduct a study on the request. If necessary, JICA send a Preliminary Study Mission to the recipient country to confirm the contents of the request.

Secondly, JICA conducts the study (Basic 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 Grant Aid Program, based on the Basic 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 signed by the Governments of Japan and the recipient country.

Finally, for the implementation of the project, JICA assists the recipient country in such matters as preparing tenders, contracts and so on.

(2) Basic Design Study

1) Contents of the Study

The aim of the Basic Design Study (hereinafter referred to as "the Study"), conducted by JICA on a requested project (hereinafter referred to as "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:

- a) confirmation of the background, objectives and benefits of the Project and also institutional capacity of agencies concerned of the recipient country necessary for the Project's implementation;
- b) evaluation of the appropriateness of the Project to be implemented under the Grant Aid Scheme from the technical, social and economic points of view;
- c) confirmation of items agreed on by both parties concerning the basic concept of the Project;
- d) preparation of a basic design of the Project; and
- e) estimation of costs of 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 Basic 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 country to take whatever measures are necessary to ensure its self-reliance in the implementation of the Project. Such measures must be guaranteed even though 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 country through the Minutes of Discussions.

2) Selection of Consultants

For the smooth implementation of the Study, JICA uses a consulting firm selected through its own procedure (competitive proposal). The selected firm participates in the Study and prepares for a report based upon the terms of reference set by JICA.

At the beginning of implementation after the Exchange of Notes, for the services of the Detailed Design and Construction Supervision of the Project, JICA recommends the same consulting firm which participated in the Study to the recipient country in order to maintain the technical consistency.

(3) Japan's Grant Aid Scheme

1) Exchange of Notes (E/N)

Japan's Grant Aid 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) "The period of the Grant" means the one fiscal year which the Cabinet approves the project for. Within the fiscal year, all procedure such as exchanging of the Notes, concluding contracts with consulting firms and contractors and final payment to them must be completed.

However, in case of delays in delivery, installation or construction due to unforeseen factors such as weather, the period of the Grant Aid can be further extended for a maximum of one fiscal year at most by mutual agreement between the two Governments.

3) Under the Grant, in principle, Japanese products and services including transport or those of the recipient country are to be purchased.

When the two Governments deem it necessary, the Grant Aid may be used for the purchase of the products or services of a third country.

However, the prime contractors, namely consulting, constructing and procurement firms, are limited to "Japanese nationals". (The term "Japanese nationals" means persons of Japanese nationality or Japanese corporations controlled by persons of Japanese nationality.)

4) Necessity of "Verification"

The Government of the recipient country or its designated authority will conclude contracts denominated in Japanese yen with Japanese nationals. Those contracts shall be verified by the Government of Japan. This "Verification" is deemed necessary to secure accountability to Japanese taxpayers.

5) Undertakings required to the Government of the recipient country

- a) to secure land necessary for the sites of the Project and to clear, level and reclaim the land prior to commencement of the construction;
- b) to provide facilities for distribution of electricity, water supply and drainage and other incidental facilities in and around the sites;
- c) to ensure all expenses and prompt execution for unloading and customs clearance at ports of disembarkation in the recipient country and internal transportation therein of the products purchased under the Grant Aid;
- d) 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;
- e) to accord Japanese nationals whose services may be required in connection with the supply of the products and services under the verified contracts such as facilities as may be necessary for their entry into the recipient country and stay therein for the performance of their work;

6) "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 the necessary staff for operation and maintenance as well as to bear all the expenses other than those covered by the Grant Aid.

7) "Re-export"

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

8) Banking Arrangement (B/A)

- a) The Government of the recipient country or its designated authority should open an account in the name of the Government of the recipient country in a bank in Japan (hereinafter referred to as "the Bank"). The Government of Japan will execute the Grant Aid by making payments in Japanese yen to cover the obligations incurred by the Government of the recipient country or its designated authority under the verified contracts.
- b) The payments will be made when payment requests are presented by the Bank to the Government of Japan under an Authorization to Pay (A/P) issued by the Government of recipient country or its designated authority.

9) Authorization to Pay (A/P)

The Government of the recipient country should bear an advising commission of an Authorization to Pay and payment commissions to the Bank.

Annex -4: Major Undertakings to be taken by Each Government

No.	Items	To be covered by Japan	To be covered by Vietnam	
1	To secure land		•	
2	To clear, level, reclaim the site, demolish existing buildings and remove trees when needed		•	
3	To construct gates and fences in and around the site		•	
4	To construct roads			
	1) Within the site	•		
	2) Outside the site		•	
5	To construct building	•		
6	To provide facilities for the distribution of electricity, water supply, , heating, drainage and other incidental facilities			
	1) Electricity			
	a. The distributing line to the watt hour meter provided by Vietnam		•	
	b. The wiring between buildings by the Grant and the watt hour meter	•		
	c. The main circuit breaker	•		
	2) Water Supply			
	a. The connection of city water or well water to cistern tank provided by the Grant		•	
	b. The cistern tank and water supply system	•		
	3) Heating			
	a. The public or private heating inlet and outlet pipes to the buildings			
	b. The heating system inside buildings			
	4) 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	•		
	5) Telephone system			
	a. The telephone trunk line to the main distribution frame/panel (MDF) of the building			
	b. The MDF and the extension after the frame/panel			
	6) Furniture and Equipment			
	a. General furniture		•	
	b. Project equipment and basic educational furniture	•		
	7	To bear the following commissions to the Japanese bank for banking services based upon the B/A		
		1) Advising commission of A/P		•
	2) Payment commission		•	
8	To ensure unloading and customs clearance at port of disembarkation in Vietnam			
	1) Marine (Air) transportation of the products from Japan to Vietnam	•		
	2) Tax exemption and customs clearance of the products at the port of disembarkation		•	
	3) Internal transportation from the port of disembarkation to the Project site	•		
9	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 Vietnam and stay therein for the performance of their work		•	

Handwritten signature

10	To exempt Japanese nationals from customs duties, internal taxes and other fiscal levies which may be imposed in Vietnam with respect to the supply of the products and services under the verified contracts.		•
11	To maintain and use properly and effectively the facilities contracted and equipment provided under the Grant		•
12	To bear all the expenses, other than those to be borne by Grant, necessary for construction of the facilities as well as for the transportation of the equipment.		•

B/A : Banking Arrangement, A/P : Authorization to Pay

Annex-5: Site Preparation Works to be conducted by the Vietnamese Side

Name of School	Item
Tuyen Quang Province	
TQ-2	Vinh Loc Removal of existing building Filling and Provision of retaining wall Removal of pavement Relocation of fence
TQ-3	Bac Muc Grading of land
TQ-5s	Thuong Am Removal of existing building Removal of trees Cutting and leveling Improvement of access road
TQ-6	Phan Thiet Removal of existing building Removal of trees Removal of pavement
TQ-7	Thai Binh Filling
TQ-8	Son Nam Relocation of electric line and post Removal of trees Filling
TQ-10s	Xuan Quang Removal of existing building Removal of trees Cutting, Provision of retaining wall and ditch Relocation of gate
TQ-14	Phuc Thinh Relocation of existing building Removal of pavement Removal of existing building (if necessary) Removal of trees (if necessary)
TQ-17s	Dang Chau Removal of existing building Improvement of access road Cutting and Filling
Pho Tho Province	
PT-4	Tieu Son Relocation of temporary buildings
PT-5	Det Relocation of basketball facilities
PT-6	Van Lung Removal of existing building
PT-8	Co Tiet None
PT-10	Dong Xuan Removal of existing buildings

PT-11	Trung Nghia	Removal of trees Relocation of electric line and post
PT-15	Vo Mieu 2	Removal of trees Relocation of badminton facilities
PT-16	Thanh Van	Removal of trees Removal of existing toilet Removal of pavement
PT-20	Ha Thach	Cutting and leveling

Ted

Appendix 5

Cost Estimation Borne by the Recipient Country

5. Cost Estimation Borne by the Recipient Country

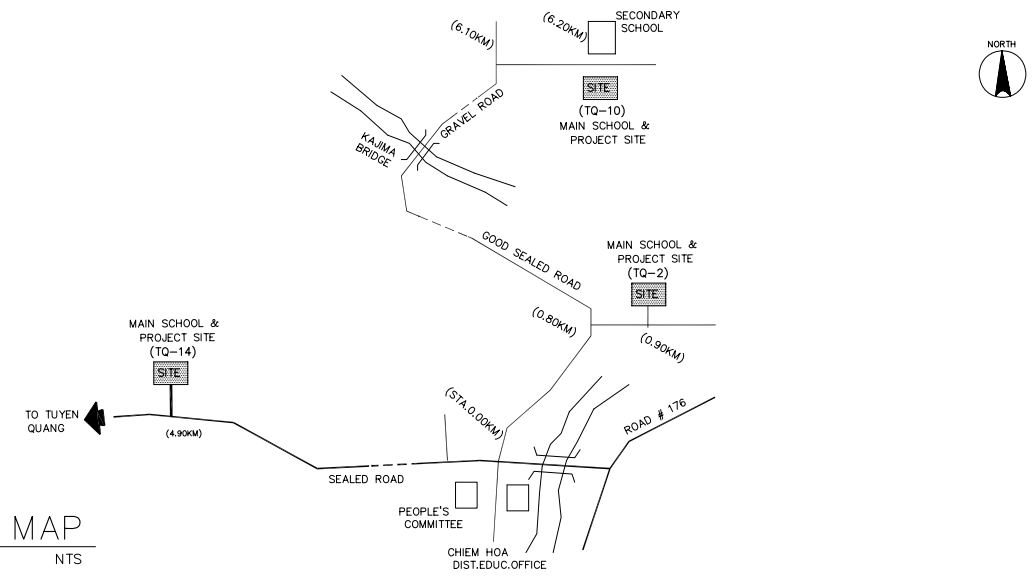
School ID	Name of School	Demolition of Exist. Bldg/Slab	Demolition of Exist. Pavement	Removal of Exist. Trees	Plumbing Work	Electrical Work	Site Creation		Retaining Wall	
							Fill	Cut		
Tuyen Quang Province										
TQ-	2	Vinh Loc	1,002,400	350,000	0	420,000	4,400,000	9,520,000	0	48000000
TQ-	3	Bac Muc	0	0	0	840,000	2,750,000	0	0	0
TQ-	5s	Thuong Am (Sub School)	364,000	0	0	0	3,300,000	0	0	0
TQ-	6	Phan Thiet	1,604,400	350,000	68,000	840,000	1,980,000	0	0	0
TQ-	7	Thai Binh	0	0	0	420,000	1,980,000	0	0	0
TQ-	8	Son Nam	0	0	136,000	420,000	1,430,000	3,360,000	0	0
TQ-	10s	Xuan Quang (Sub School)	212,800	0	0	0	1,650,000	0	10,500,000	240,000,000
TQ-	14	Phuc Thinh	42,000	280,000	102,000	420,000	3,850,000	0	0	0
TQ-	17s	Dang Chau (Sub School)	226,800	0	0	0	3,300,000	0	12,880,000	0
Total		9sites	3,452,400	980,000	306,000	3,360,000	24,640,000	12,880,000	23,380,000	288,000,000
Phu Tho Province										
PT-	4	Tieu Son	1,310,400	0	0	420,000	1,760,000	0	0	0
PT-	5	Det	0	0	0	840,000	2,750,000	0	0	0
PT-	6	Van Lung	1,663,200	0	306,000	840,000	1,980,000	0	0	0
PT-	8	Co Tiet	0	0	0	840,000	5,500,000	0	0	0
PT-	10	Dong Xuan(New Site)	1,209,600	70,000	0	420,000	1,980,000	0	0	0
PT-	11	Trung Nghia	0	0	0	420,000	1,320,000	0	0	0
PT-	15	Vo Mieu 2	98,000	630,000	68,000	420,000	1,650,000	0	0	0
PT-	20	Ha Thach	0	0	0	840,000	2,750,000	0	140,000,000	259,200,000
Total		8sites	4,281,200	700,000	374,000	5,040,000	19,690,000	0	140,000,000	259,200,000

(VND)

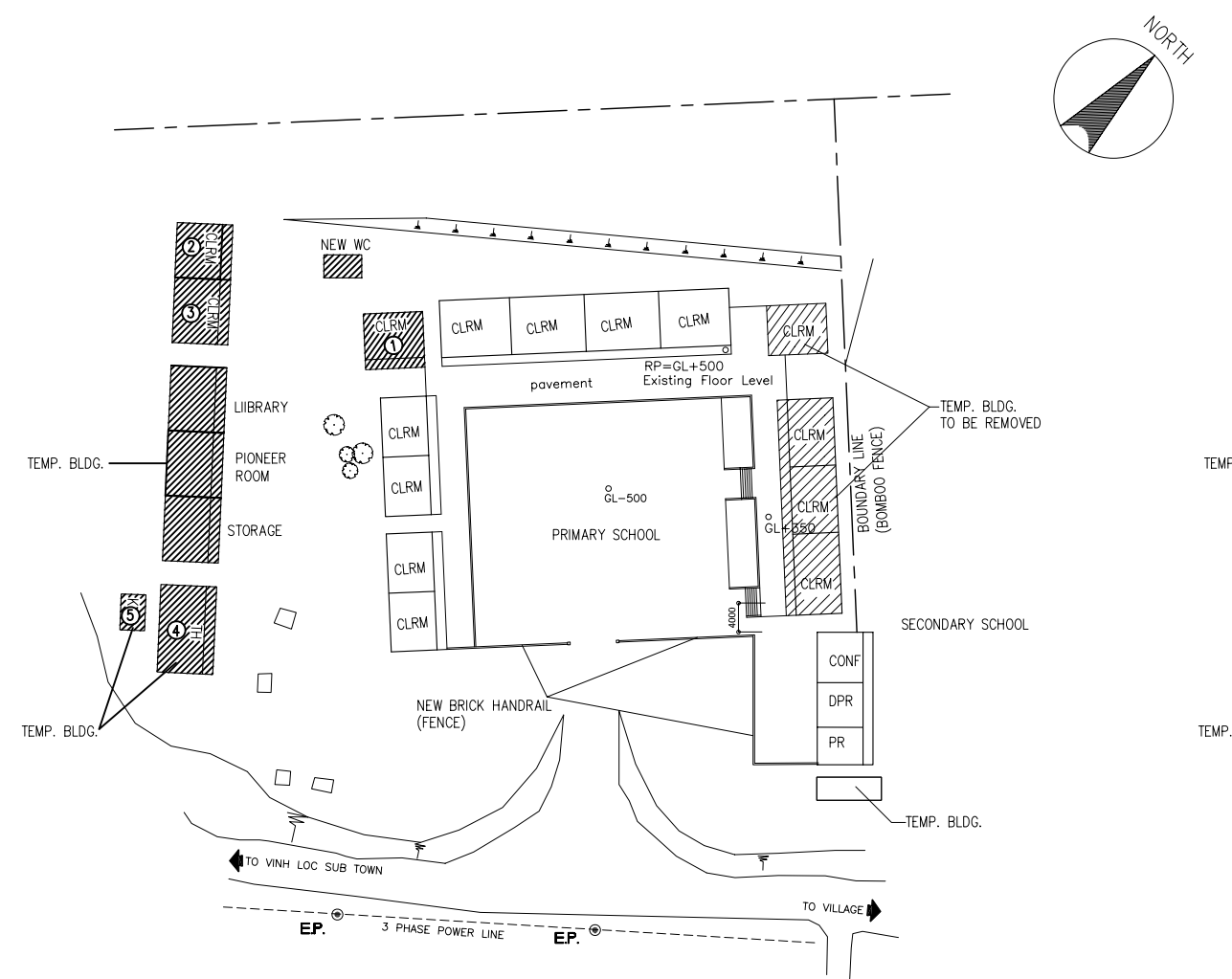
Appendix 6

Site Plan

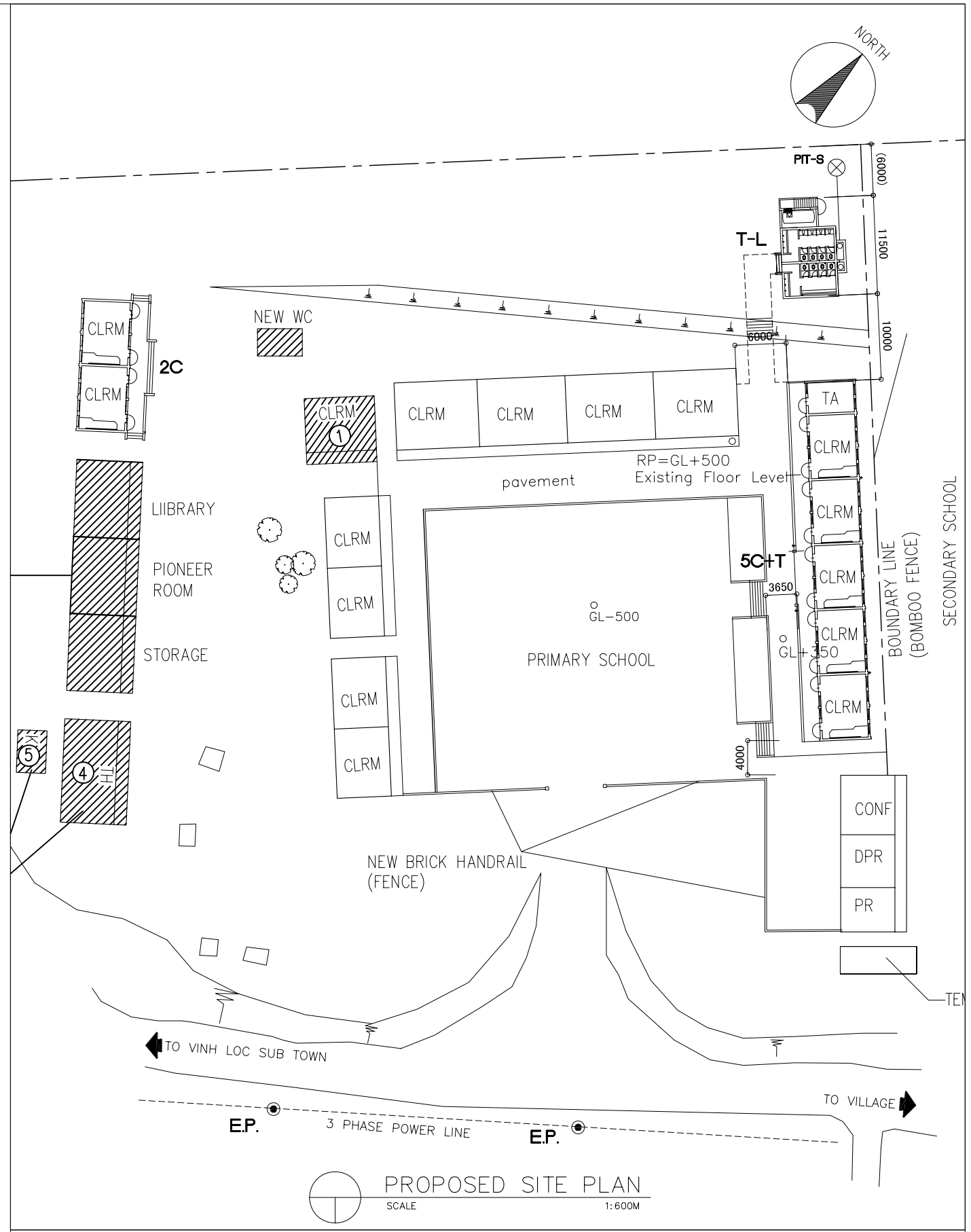
NAME OF SCHOOL	VINH LOC PRIMARY SCHOOL			SCHOOL ID	TQ-2
DIVISION	PROVINCE OF TUYEN QUANG	DISTRICT	CHIEM HOA	DATE OF SURVEY	



VICINITY MAP
SCALE NTS



EXISTING SITE DEVELOPMENT PLAN
SCALE 1:1000M

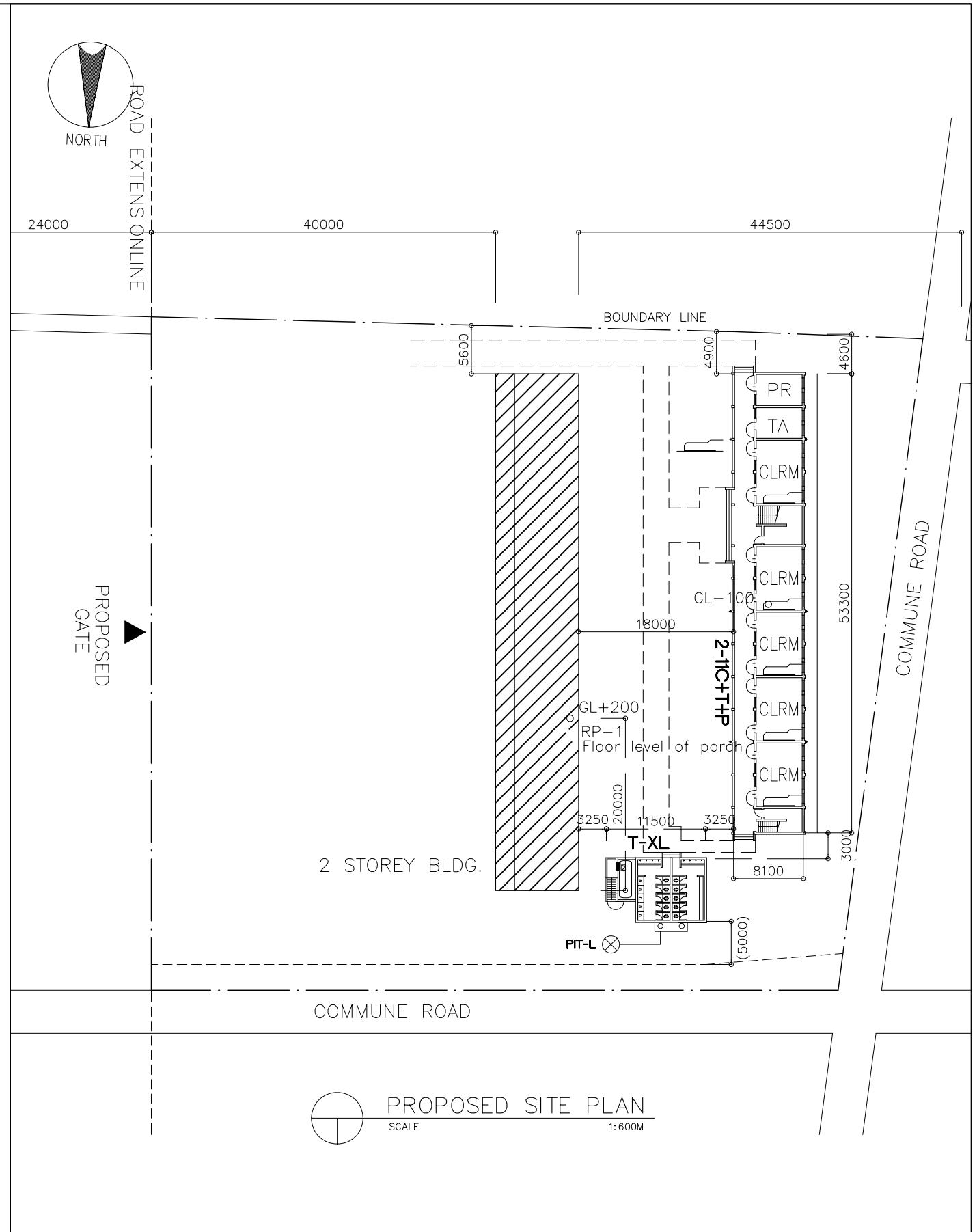
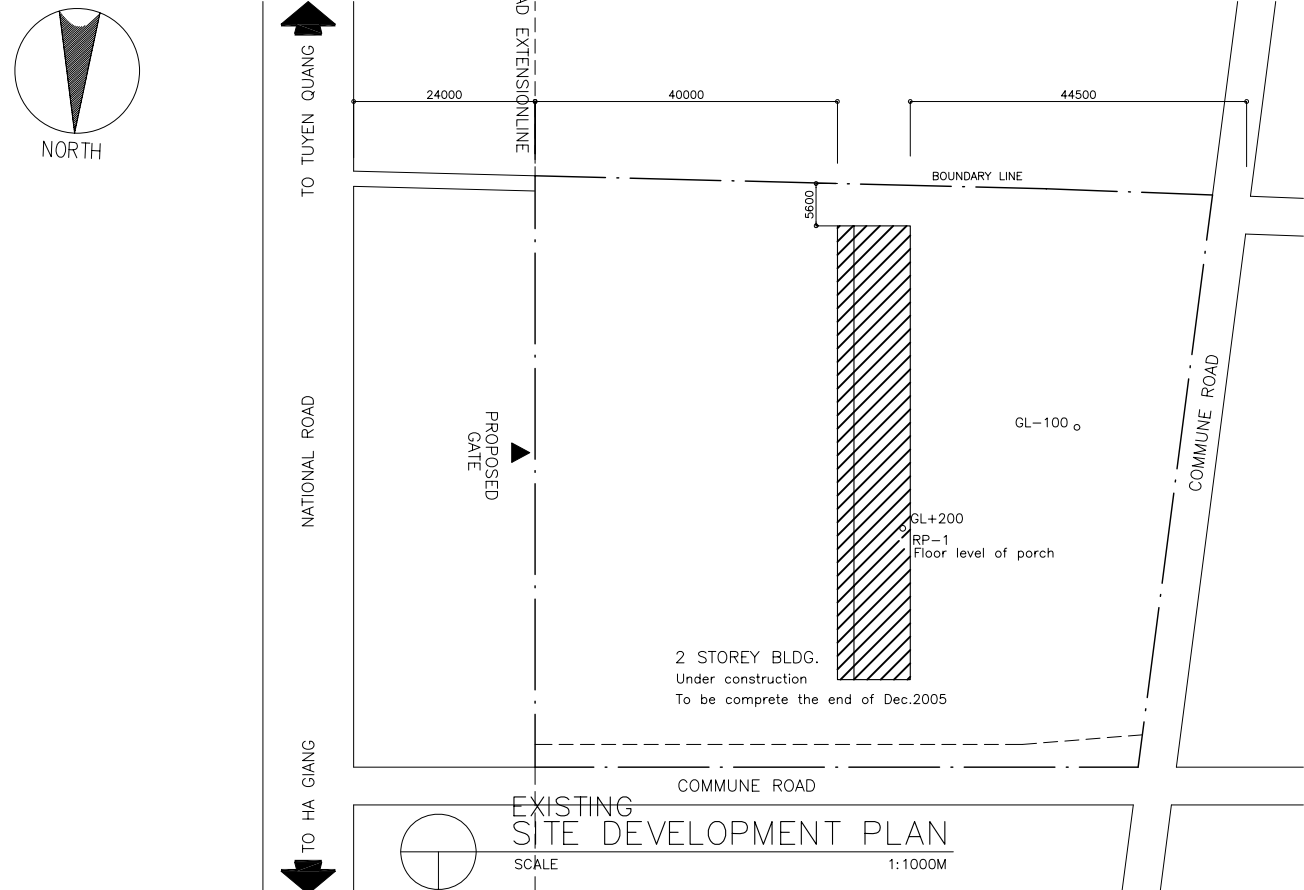
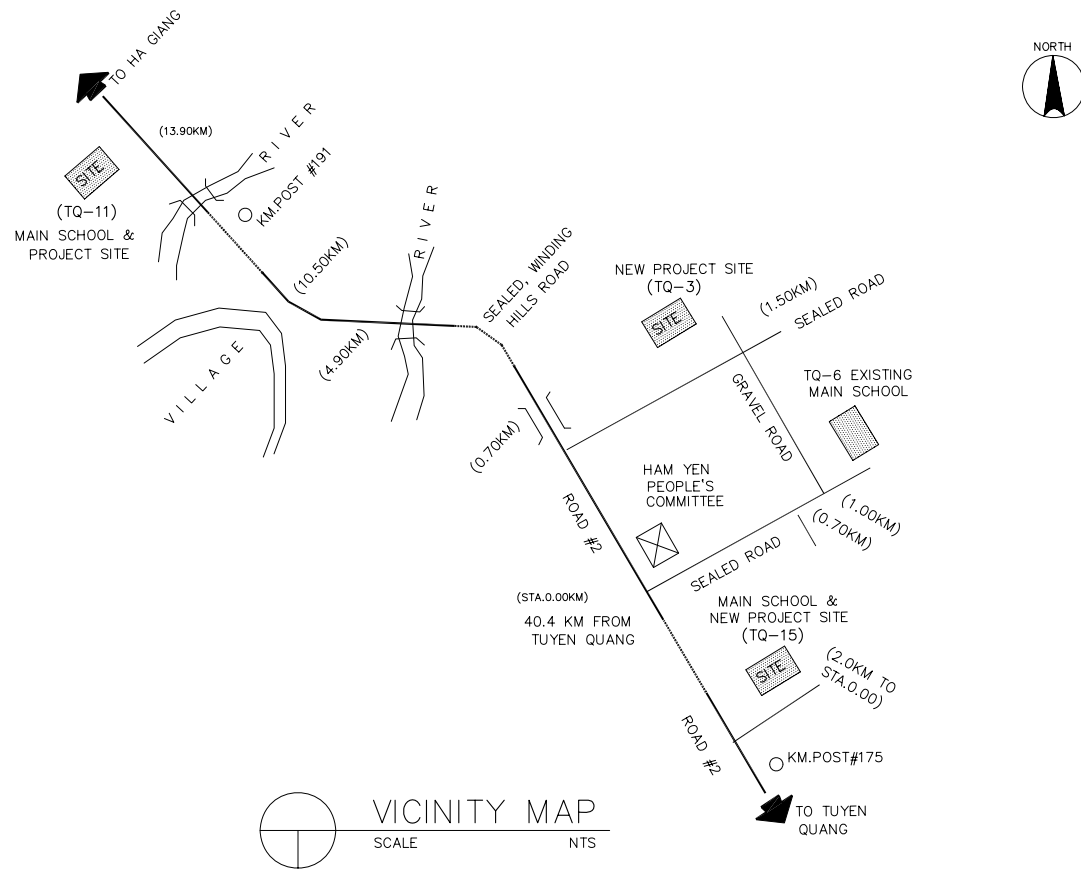


PROPOSED SITE PLAN
SCALE 1:600M

LEGEND:

CLRM	Class Room	MTG	Meeting Room	GH	Guard House	▲	Entrance
O	Office	TR	Teacher's Room	ST	Septic Tank	⊕	PUMP
L	Library	WT	Water Tank	⊙ W	Well	⊗	EWT
K	Kitchen	AD	Administration Office	⊙ EP	Electric Post	○	Percolation Pit
CONF	Conference Room	TH	Teacher's House				
MP	Multi Purpose Room	TA	Teaching Aid Room				
PR	Principal's Room	T	Toilet				
VPR	Vice Principal's Room	S	Storage				

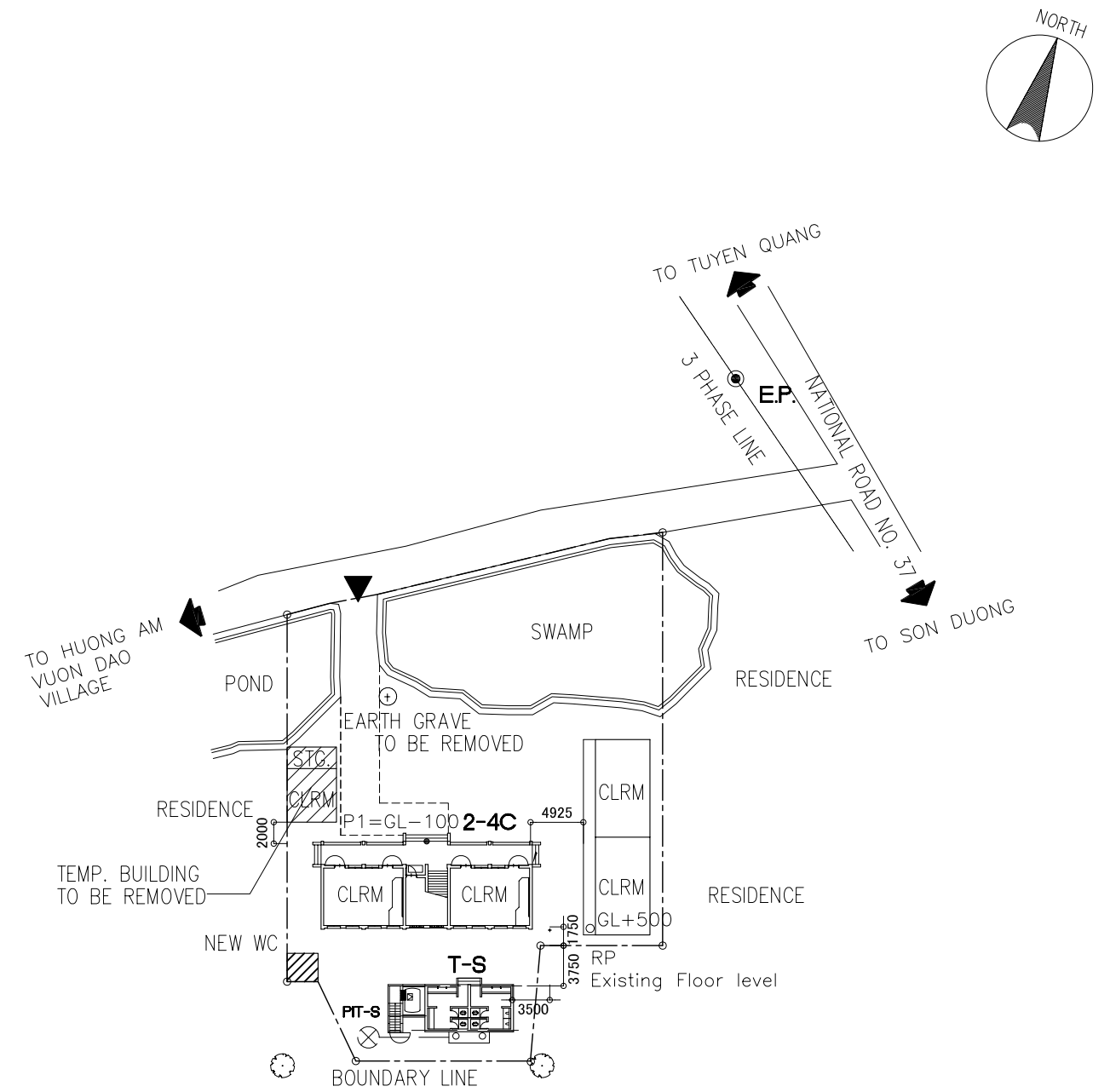
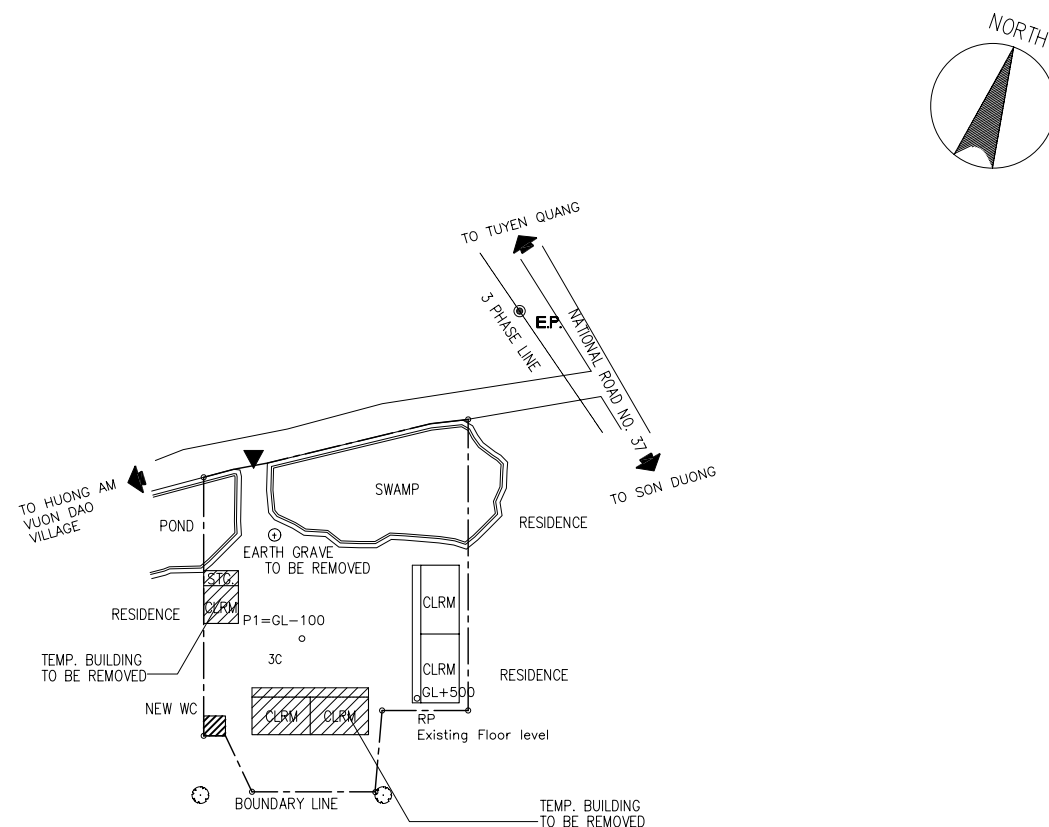
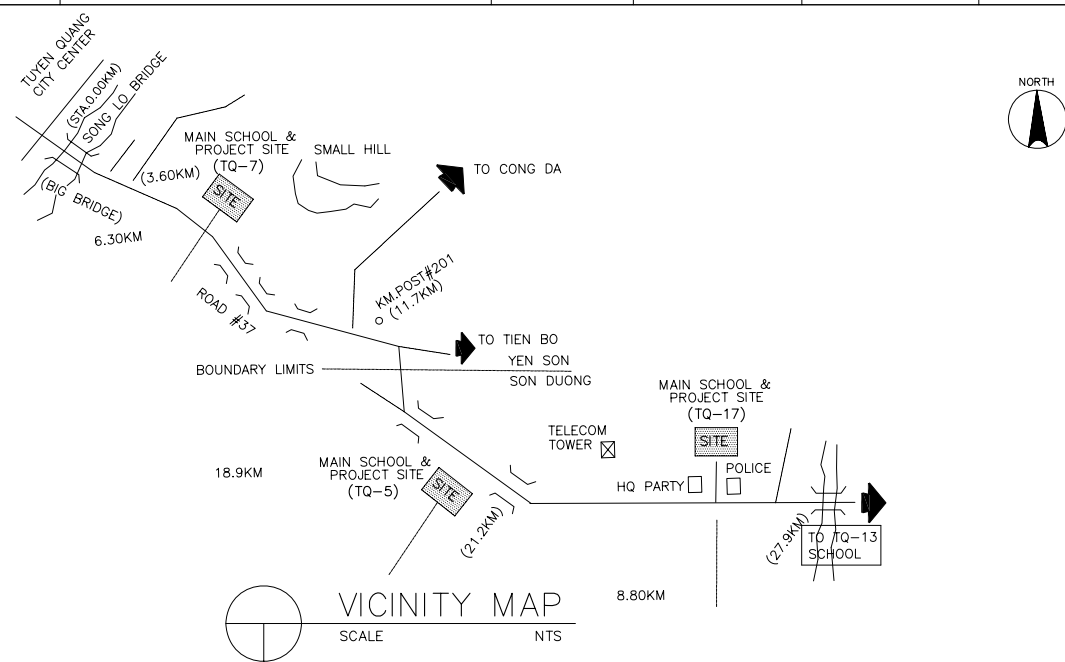
NAME OF SCHOOL	BAC MUC PRIMARY SCHOOL			SCHOOL ID	TQ-3
DIVISION	PROVINCE OF TUYEN QUANG	DISTRICT	HAM YEN	DATE OF SURVEY	



LEGEND:

CLRM	Class Room	MTG	Meeting Room	GH	Guard House	▲	Entrance
O	Office	TR	Teacher's Room	ST	Septic Tank	⊠	PUMP
L	Library	WT	Water Tank	⊙ W	Well	⊠	EWT
K	Kitchen	AD	Administration Office	⊙ EP	Electric Post		
CONF	Conference Room	TH	Teacher's House	○	Percolation Pit		
MP	Multi Purpose Room	TA	Teaching Aid Room				
PR	Principal's Room	T	Toilet				
VPR	Vice Principal's Room	S	Storage				

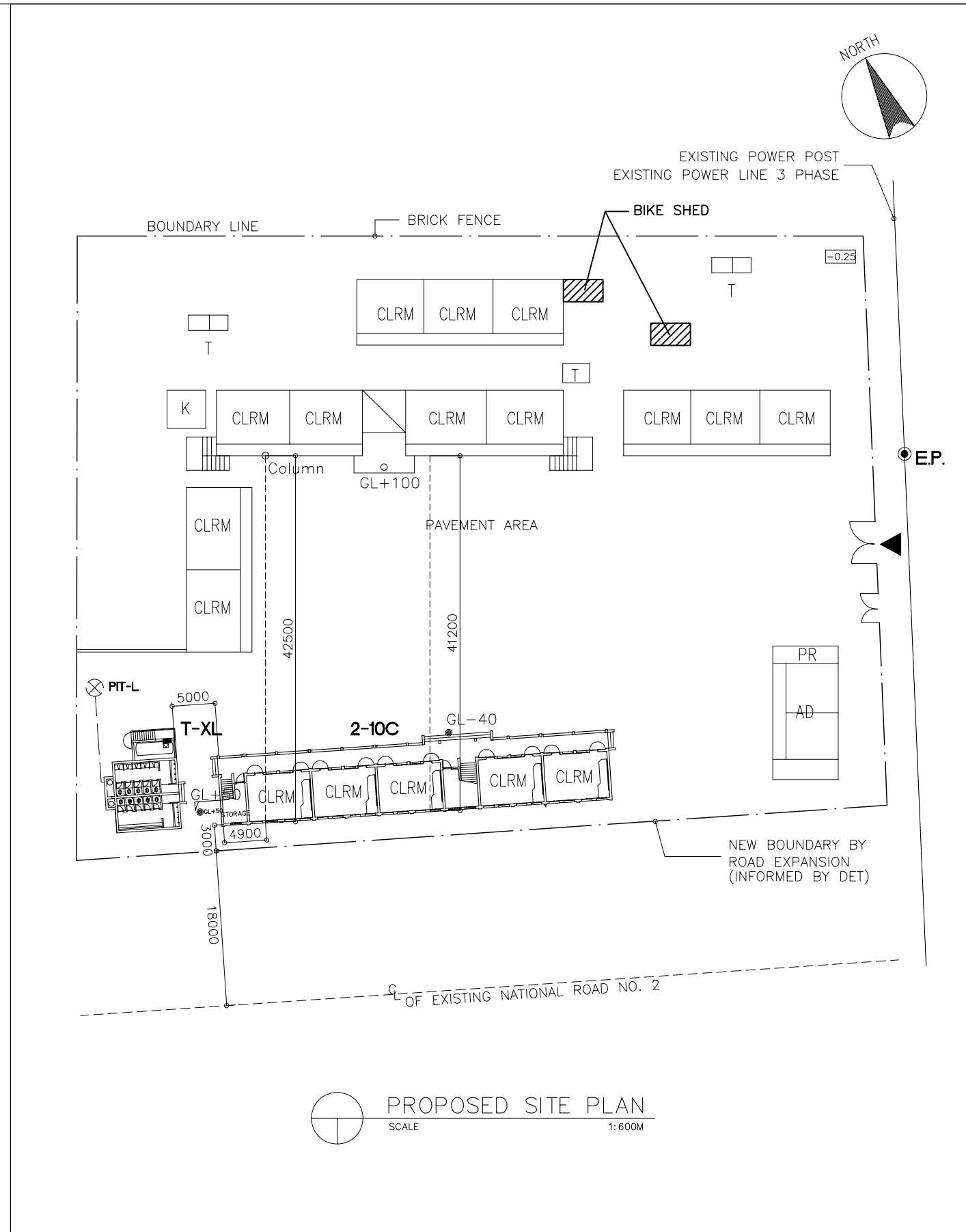
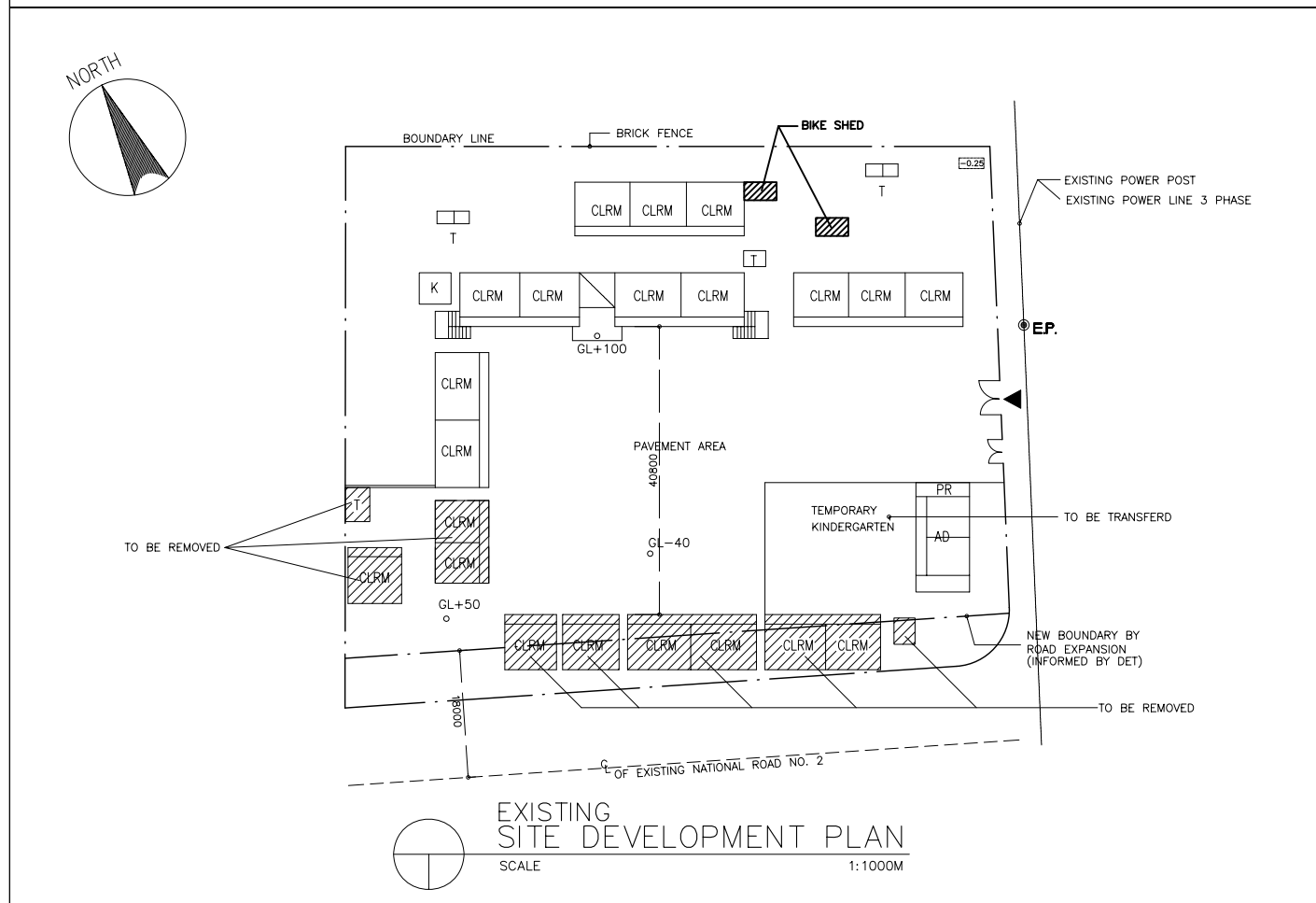
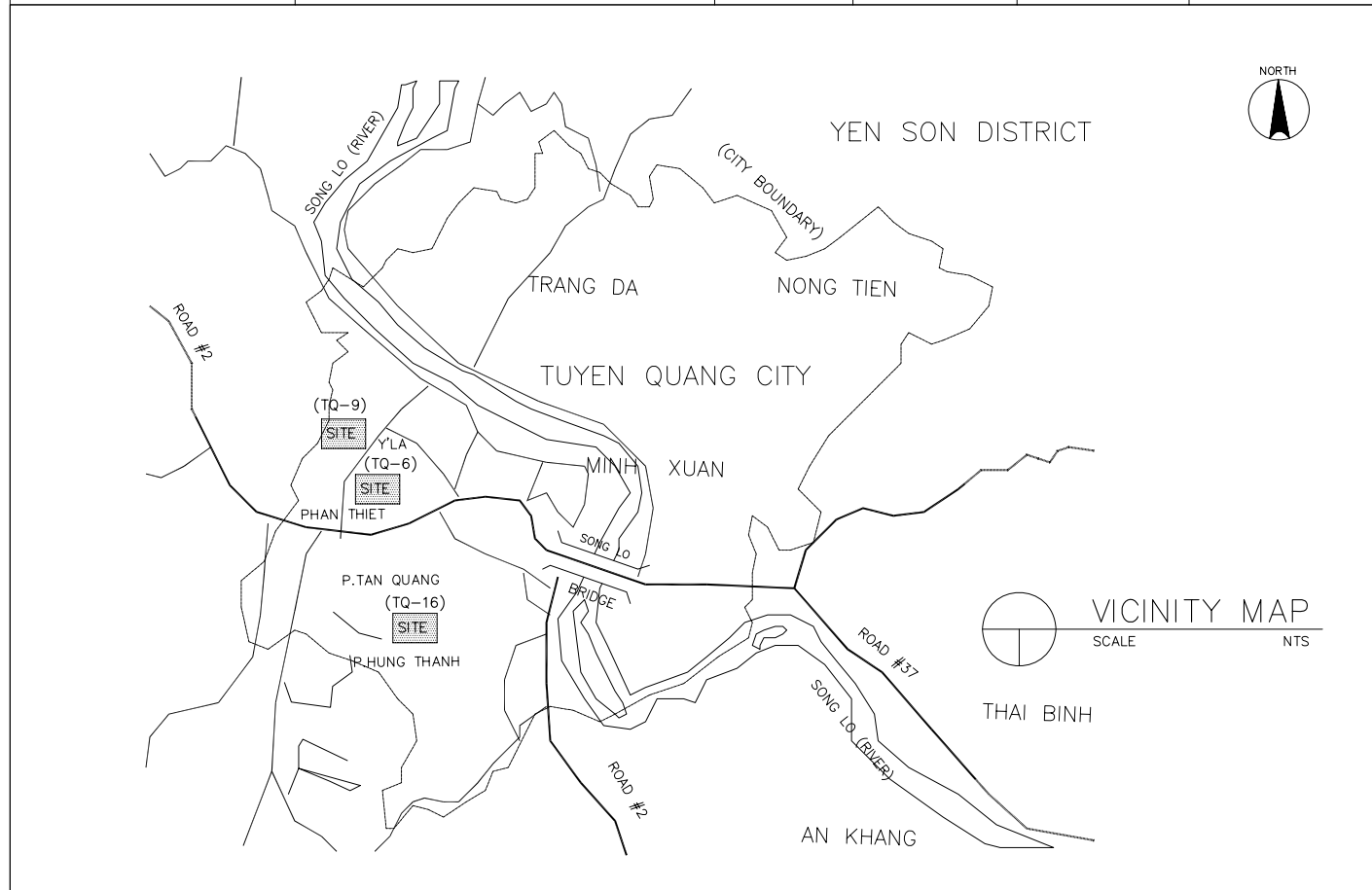
NAME OF SCHOOL	THUONG AM SUB-SCHOOL			SCHOOL ID	TQ-5S
DIVISION	PROVINCE OF TUYEN QUANG	DISTRICT	SON DONG	DATE OF SURVEY	



LEGEND:

CLRM	Class Room	MTG	Meeting Room	GH	Guard House	▲	Entrance
O	Office	TR	Teacher's Room	ST	Septic Tank	⊠	PUMP
L	Library	WT	Water Tank	⊙ W	Well	⊠	EWT
K	Kitchen	AD	Administration Office	● EP	Electric Post	○	Percolation Pit
CONF	Conference Room	TH	Teacher's House				
MP	Multi Purpose Room	TA	Teaching Aid Room				
PR	Principal's Room	T	Toilet				
VPR	Vice Principal's Room	S	Storage				

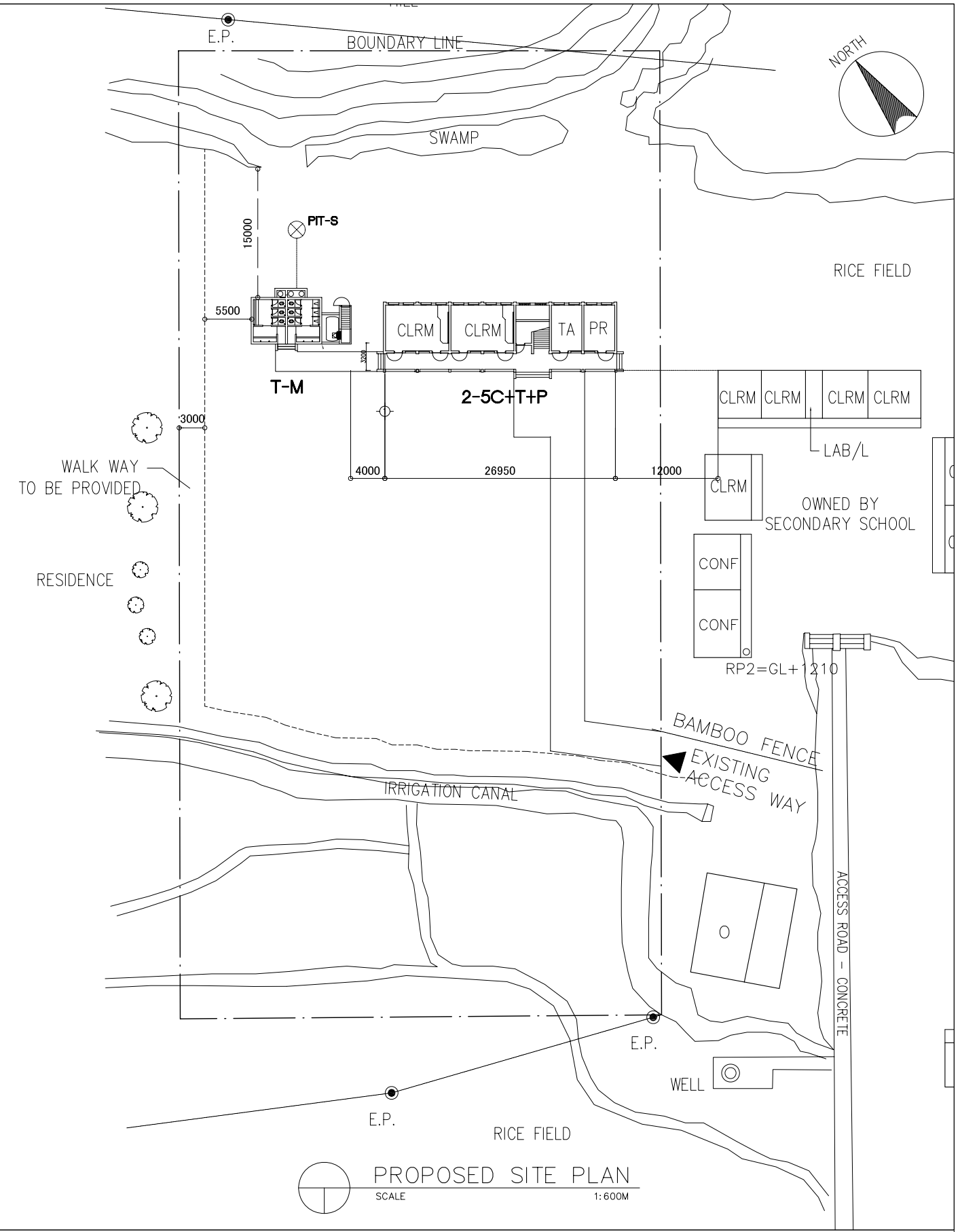
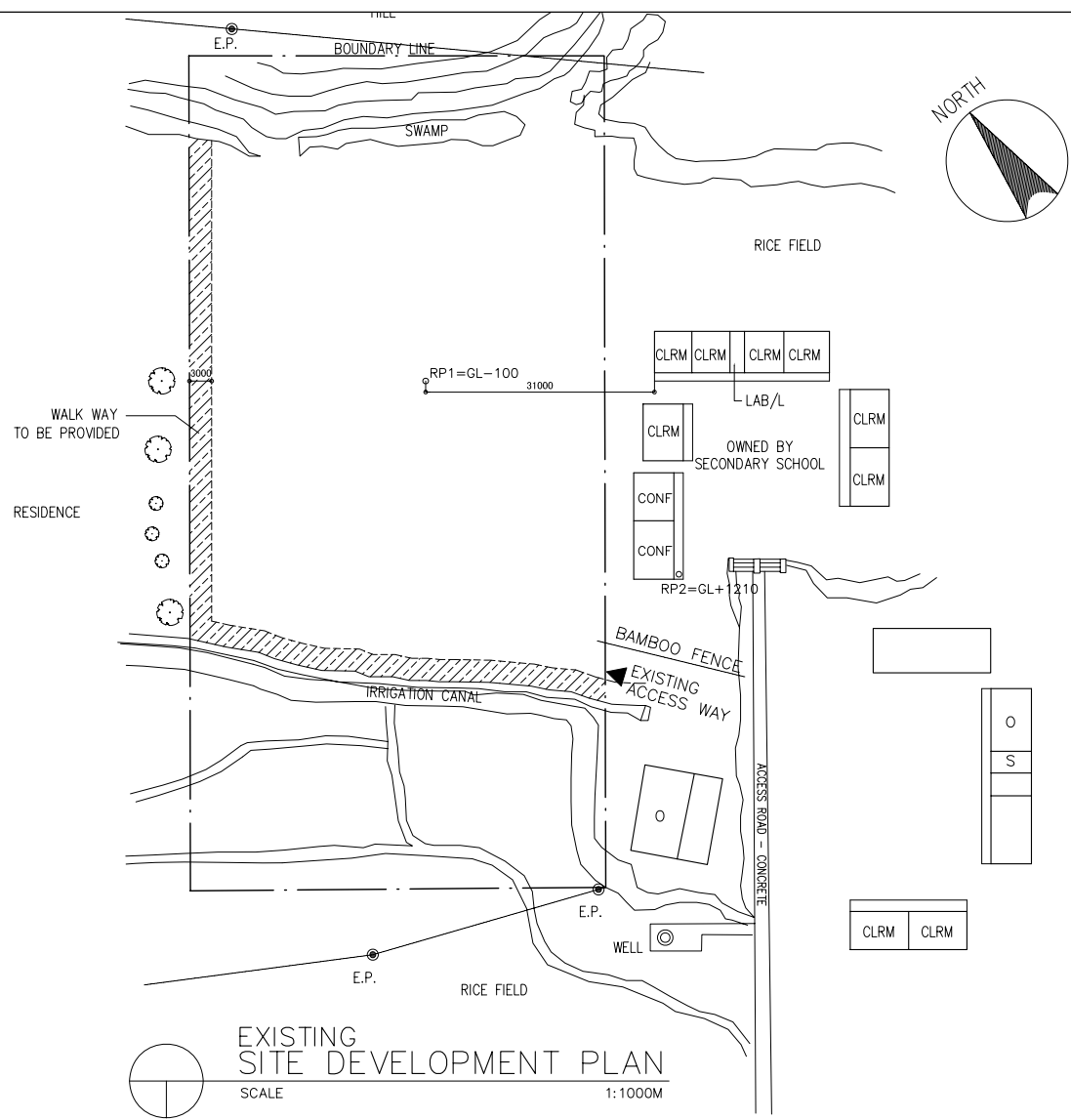
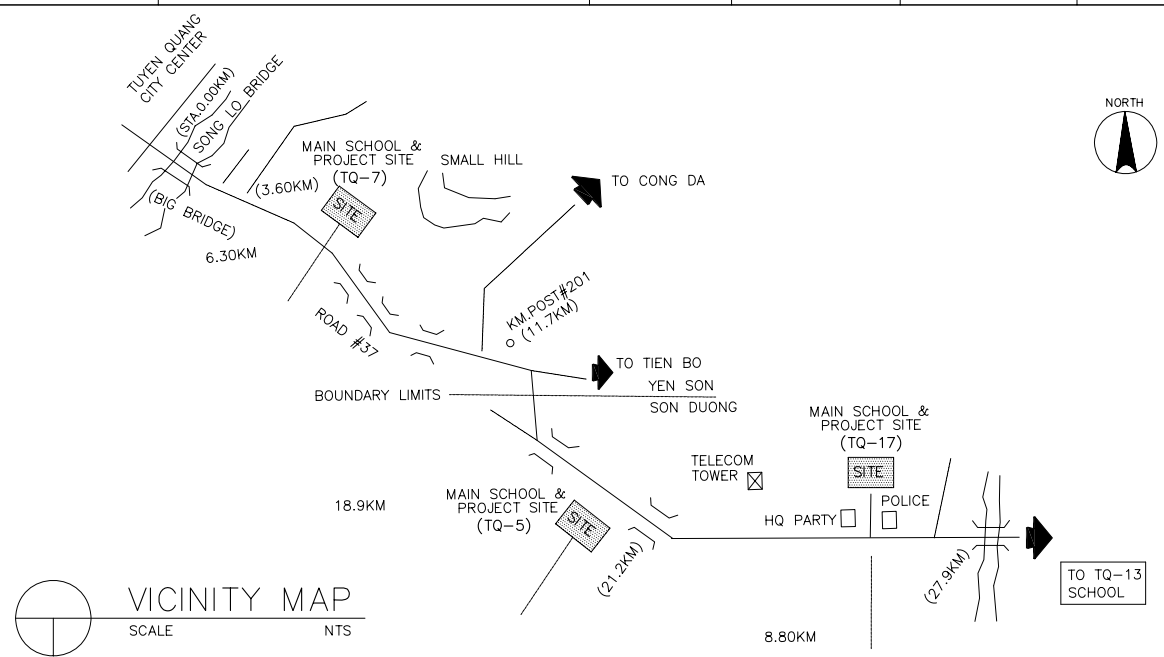
NAME OF SCHOOL	PHAN THIET PRIMARY SCHOOL			SCHOOL ID	TQ-6
DIVISION	PROVINCE OF TUYEN QUANG	DISTRICT	THI XA TQ	DATE OF SURVEY	



LEGEND:

CLRM	Class Room	MTG	Meeting Room	GH	Guard House	▲	Entrance
O	Office	TR	Teacher's Room	ST	Septic Tank	⊞	PUMP
L	Library	WT	Water Tank	⊙ W	Well	⊞	EWT
K	Kitchen	AD	Administration Office	⊙ EP	Electric Post	○	Percolation Pit
CONF	Conference Room	TH	Teacher's House				
MP	Multi Purpose Room	TA	Teaching Aid Room				
PR	Principal's Room	T	Toilet				
VPR	Vice Principal's Room	S	Storage				

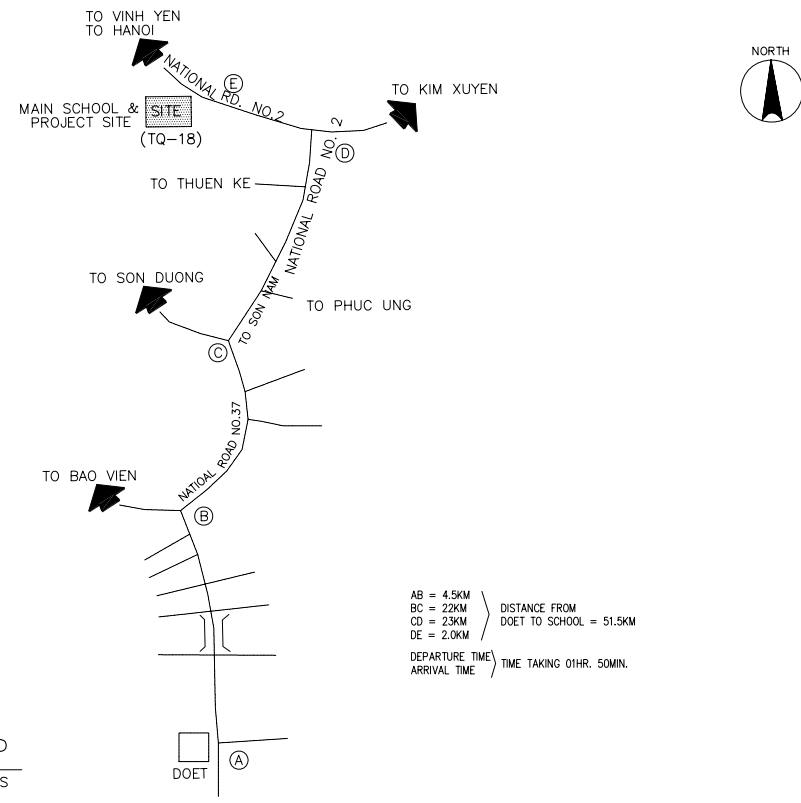
NAME OF SCHOOL	THAI BIHN PRIMARY SCHOOL			SCHOOL ID	TQ-7
DIVISION	PROVINCE OF TUYEN QUANG	DISTRICT	YEN SON	DATE OF SURVEY	



LEGEND:

CLRM	Class Room	MTG	Meeting Room	GH	Guard House	▲	Entrance
O	Office	TR	Teacher's Room	ST	Septic Tank	⊠	PUMP
L	Library	WT	Water Tank	⊙ W	Well	⊠	EWT
K	Kitchen	AD	Administration Office	● EP	Electric Post	⊗	
CONF	Conference Room	TH	Teacher's House	○	Percolation Pit		
MP	Multi Purpose Room	TA	Teaching Aid Room				
PR	Principal's Room	T	Toilet				
VPR	Vice Principal's Room	S	Storage				

NAME OF SCHOOL	SON NAM			SCHOOL ID	TQ-8
DIVISION	PROVINCE OF TUYEN QUANG	DISTRICT	SON DONG	DATE OF SURVEY	



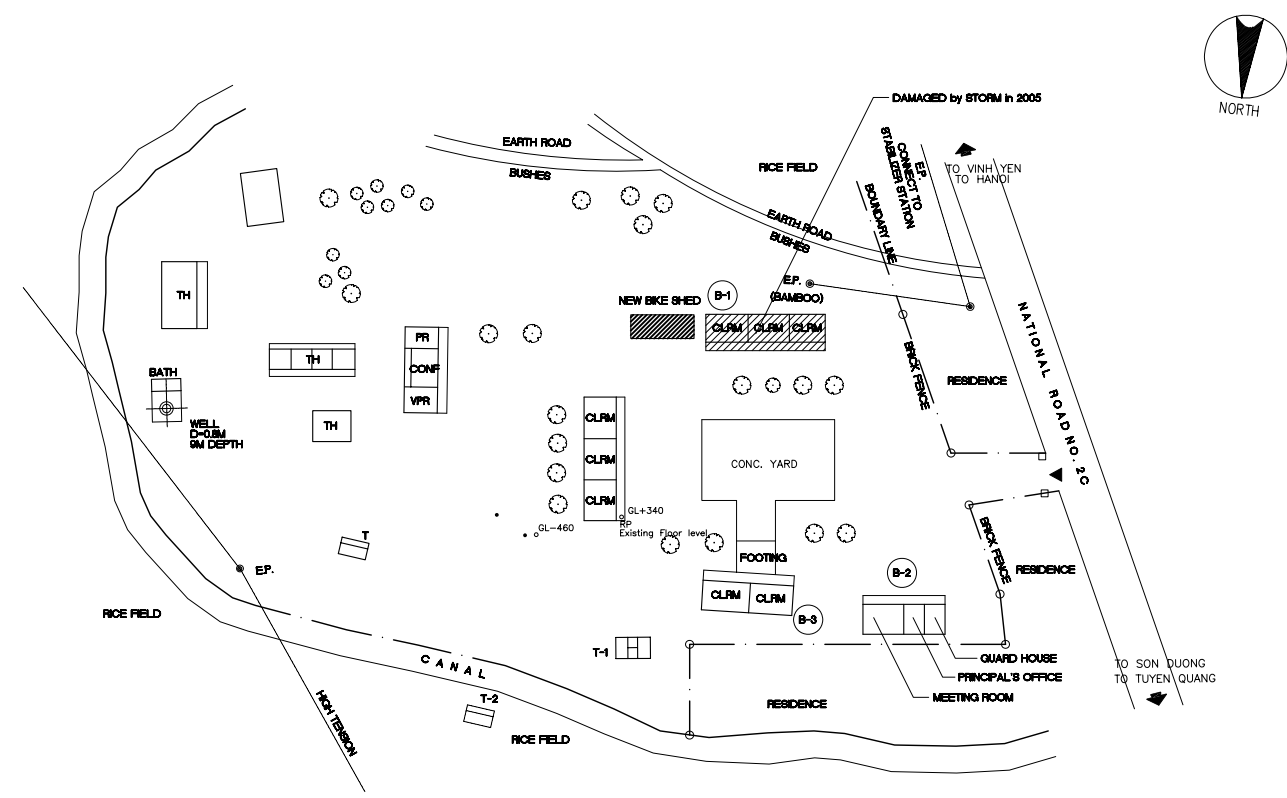
AB = 4.5KM
 BC = 2.2KM
 CD = 2.3KM
 DE = 2.0KM

DISTANCE FROM DOET TO SCHOOL = 51.5KM

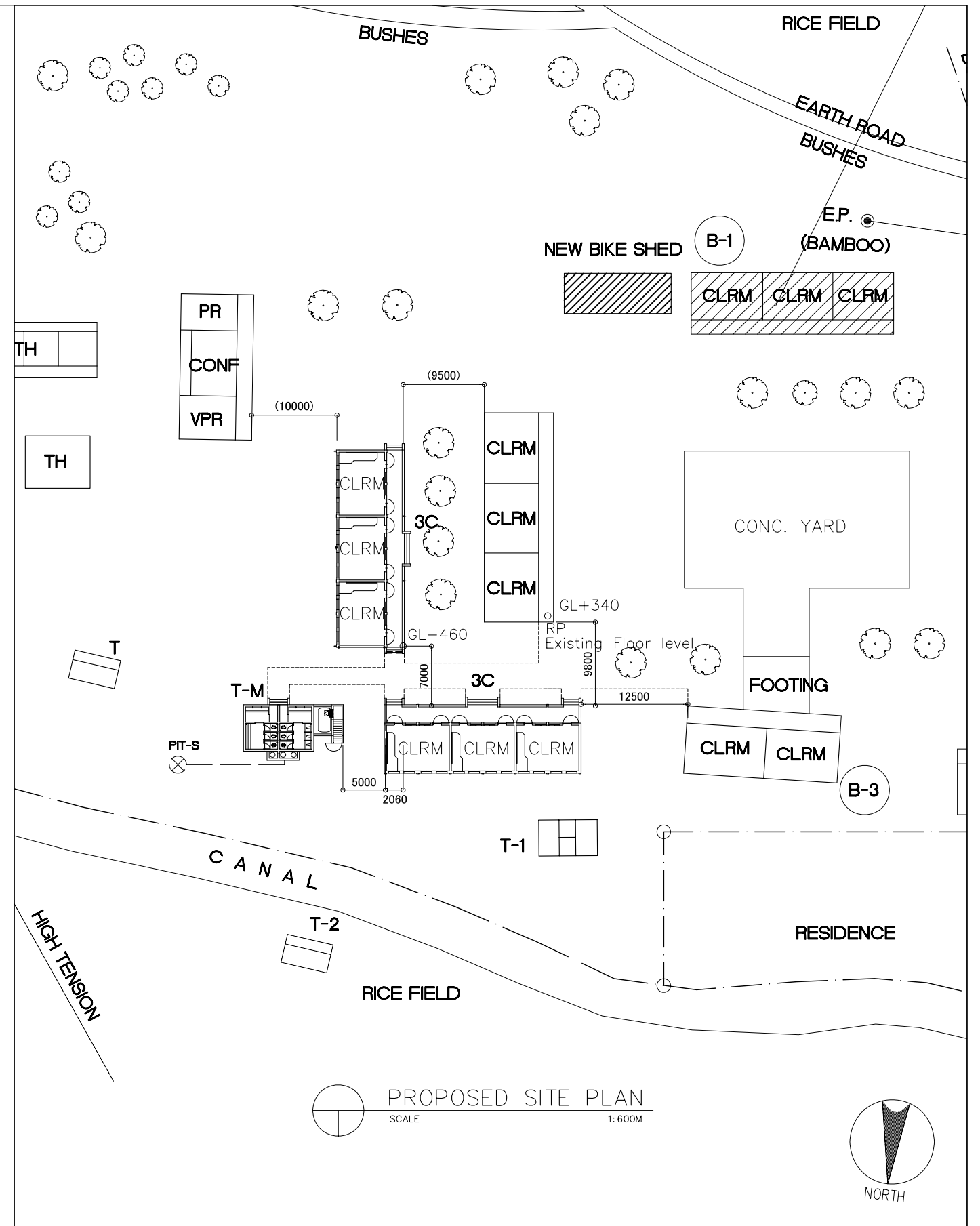
DEPARTURE TIME
 ARRIVAL TIME

TIME TAKING 01HR. 50MIN.

VICINITY MAP
 SCALE NTS



EXISTING SITE DEVELOPMENT PLAN
 SCALE 1:1500M

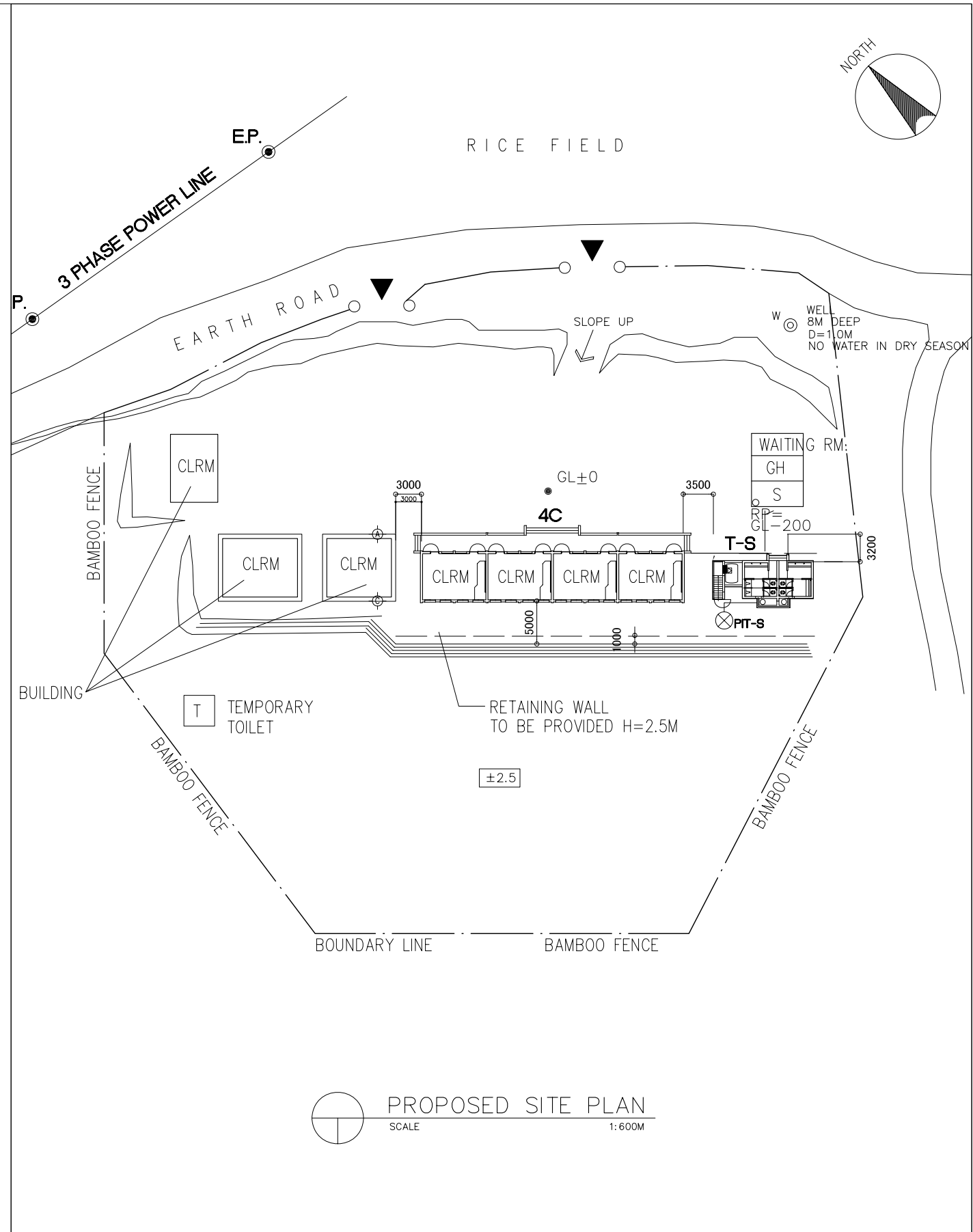
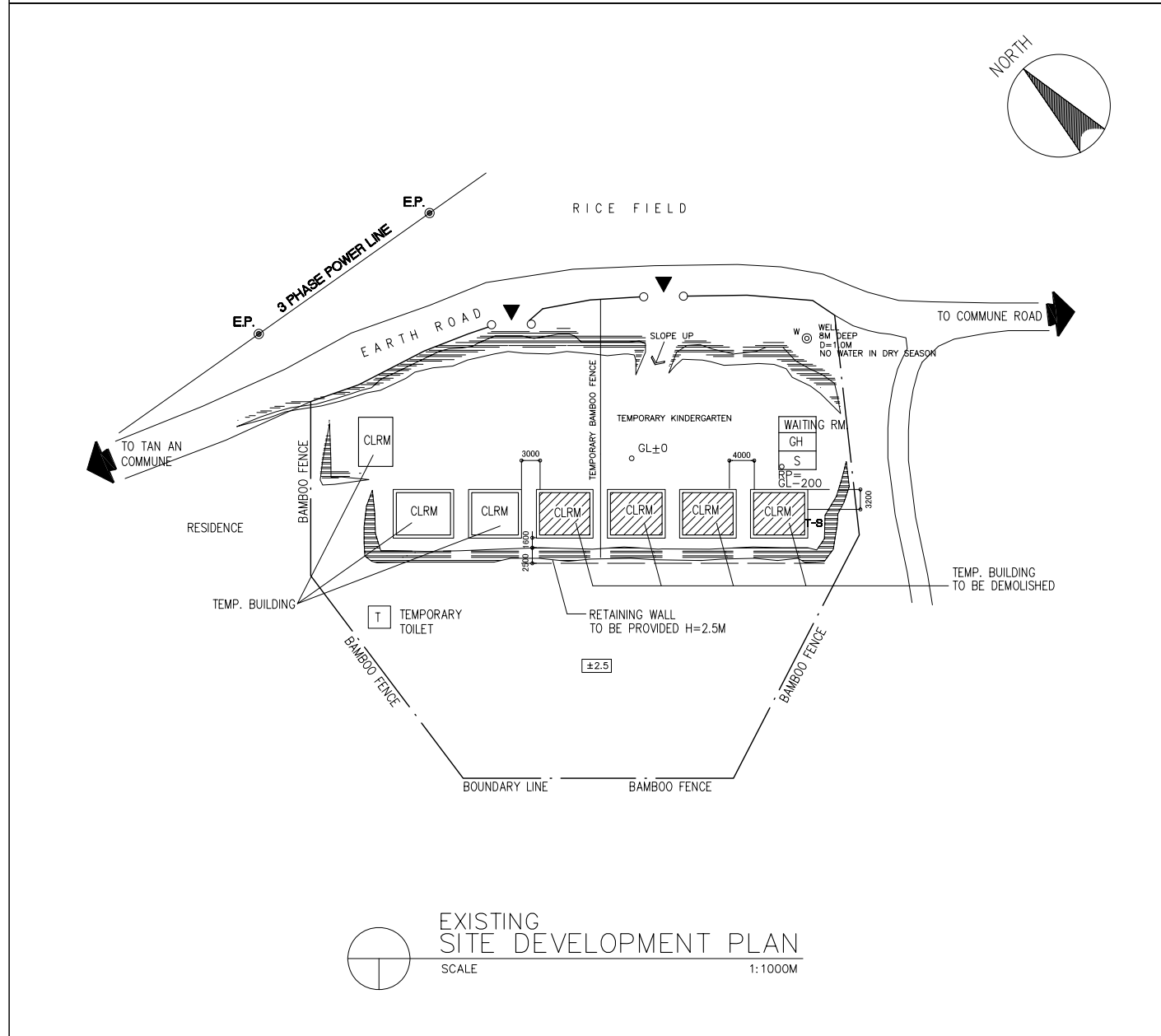
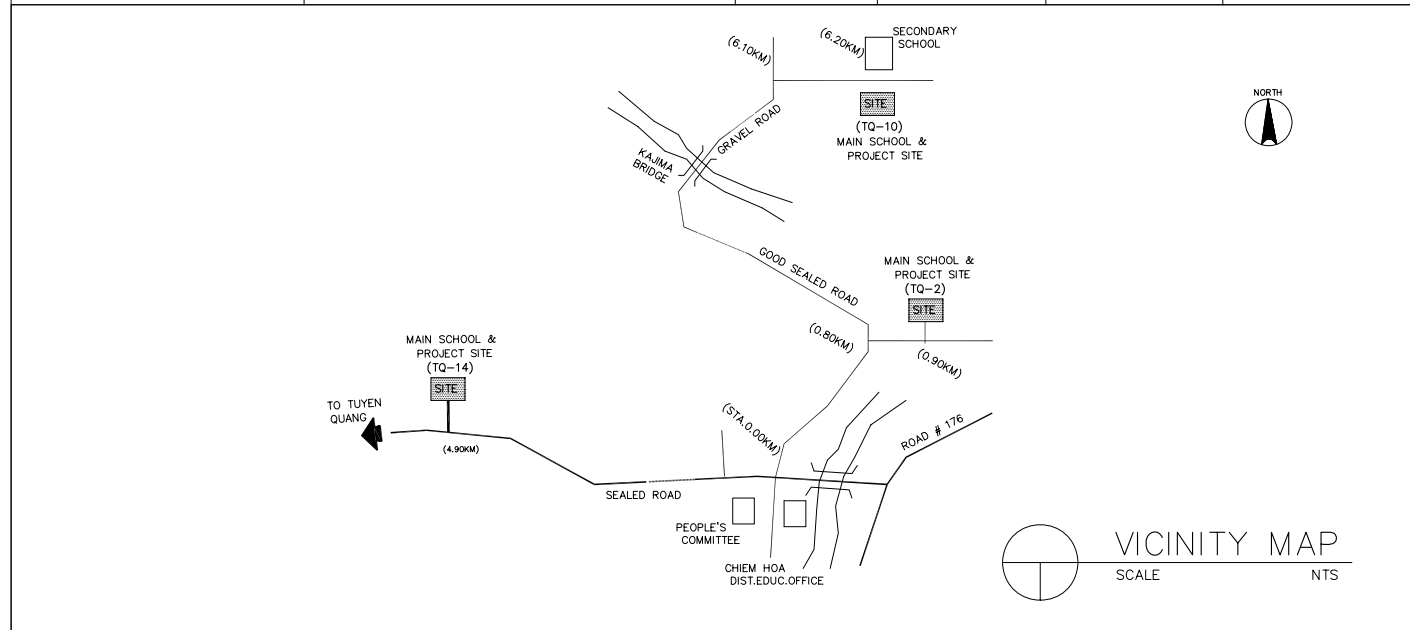


PROPOSED SITE PLAN
 SCALE 1:600M

LEGEND:

CLRM	Class Room	MTG	Meeting Room	GH	Guard House	▲	Entrance
O	Office	TR	Teacher's Room	ST	Septic Tank	⬇	PUMP
L	Library	WT	Water Tank	⊙	Well	⊗	EWT
K	Kitchen	AD	Administration Office	⊙	EP	○	Percolation Pit
CONF	Conference Room	TA	Teaching Aid Room				
MP	Multi Purpose Room	T	Toilet				
PR	Principal's Room	S	Storage				
VPR	Vice Principal's Room						

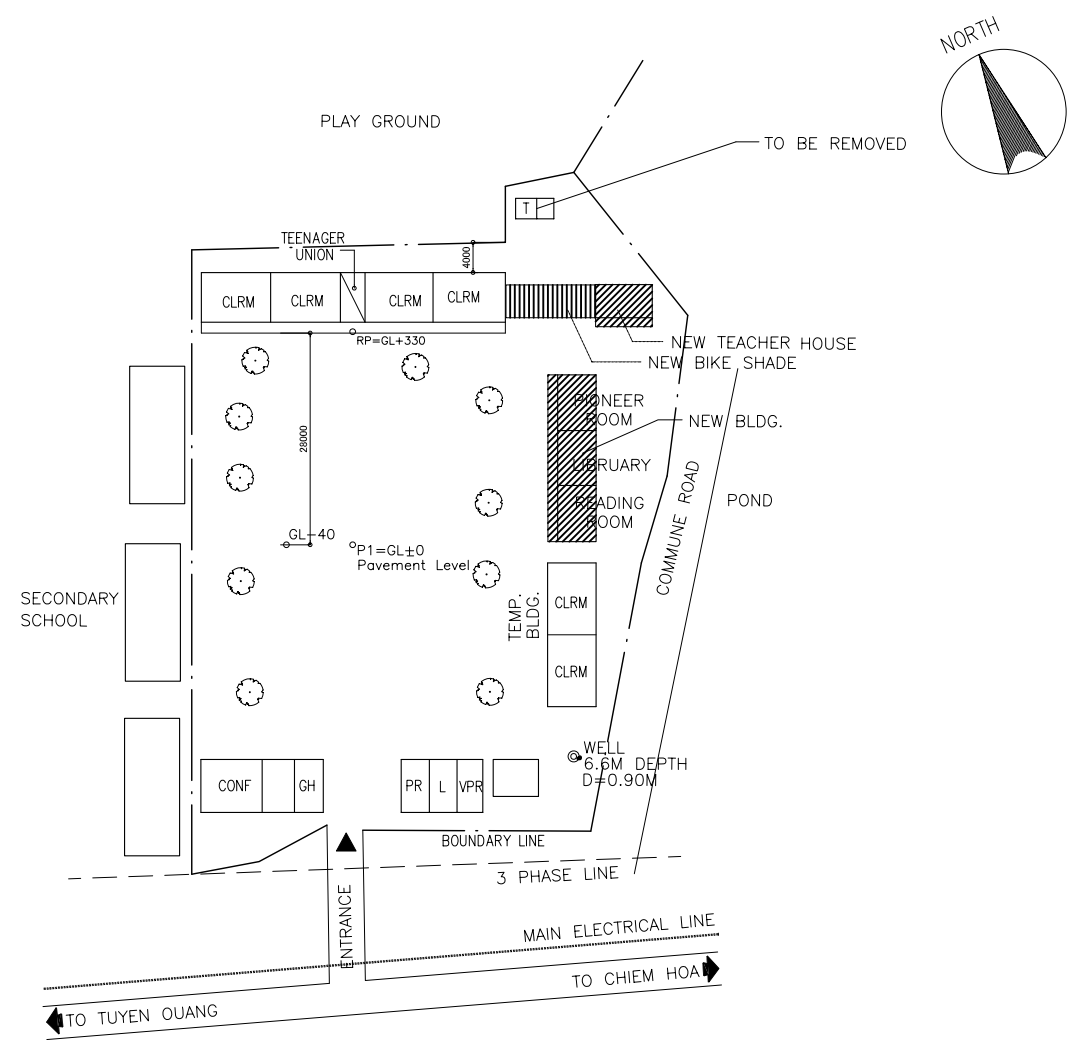
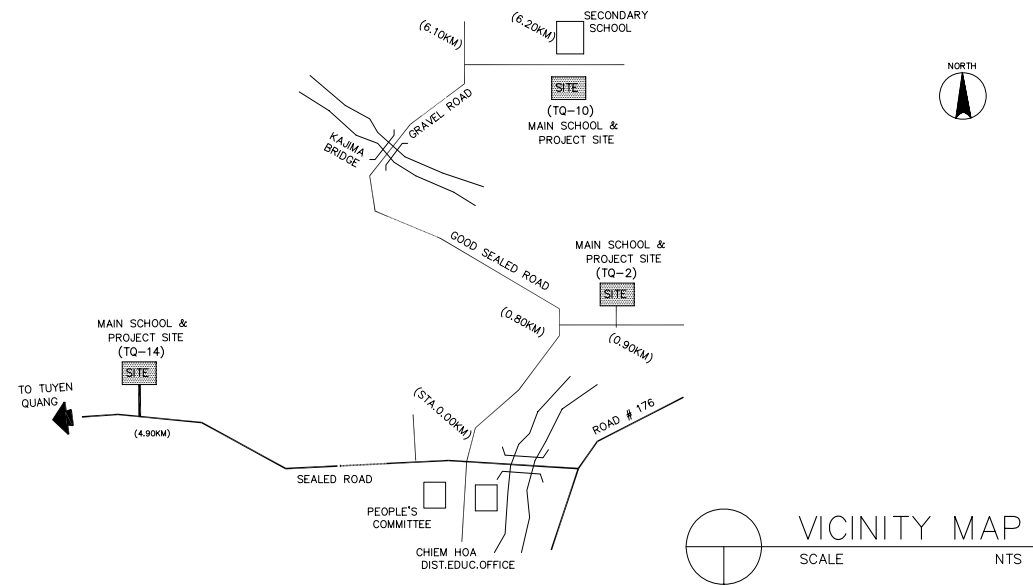
NAME OF SCHOOL	XUAN QUANG SUB SCHOOL			SCHOOL ID	TQ-10S
DIVISION	PROVINCE OF TUYEN QUANG	DISTRICT	NA HANG	DATE OF SURVEY	



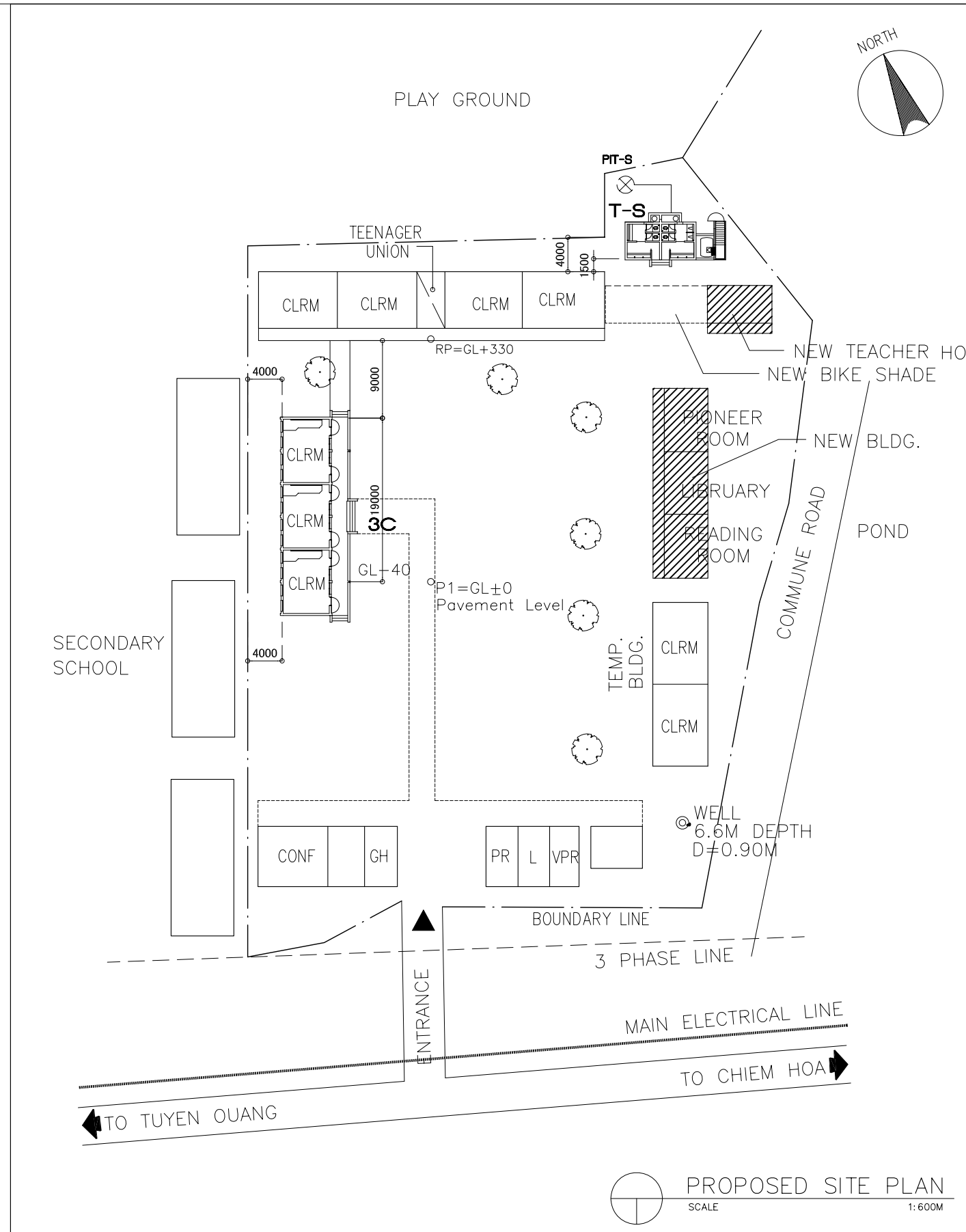
LEGEND:

CLRM	Class Room	MTG	Meeting Room	GH	Guard House	▲	Entrance
O	Office	TR	Teacher's Room	ST	Septic Tank	⊠	PUMP
L	Library	WT	Water Tank	⊙ W	Well	⊠	EWT
K	Kitchen	AD	Administration Office	● EP	Electric Post	○	Percolation Pit
CONF	Conference Room	TH	Teacher's House				
MP	Multi Purpose Room	TA	Teaching Aid Room				
PR	Principal's Room	T	Toilet				
VPR	Vice Principal's Room	S	Storage				

NAME OF SCHOOL	PHUC THINH PRIMARY SCHOOL		SCHOOL ID	TQ-14
DIVISION	PROVINCE OF TUYEN QUANG	DISTRICT	CHIEM HOA	DATE OF SURVEY



EXISTING SITE DEVELOPMENT PLAN
SCALE 1:1000M

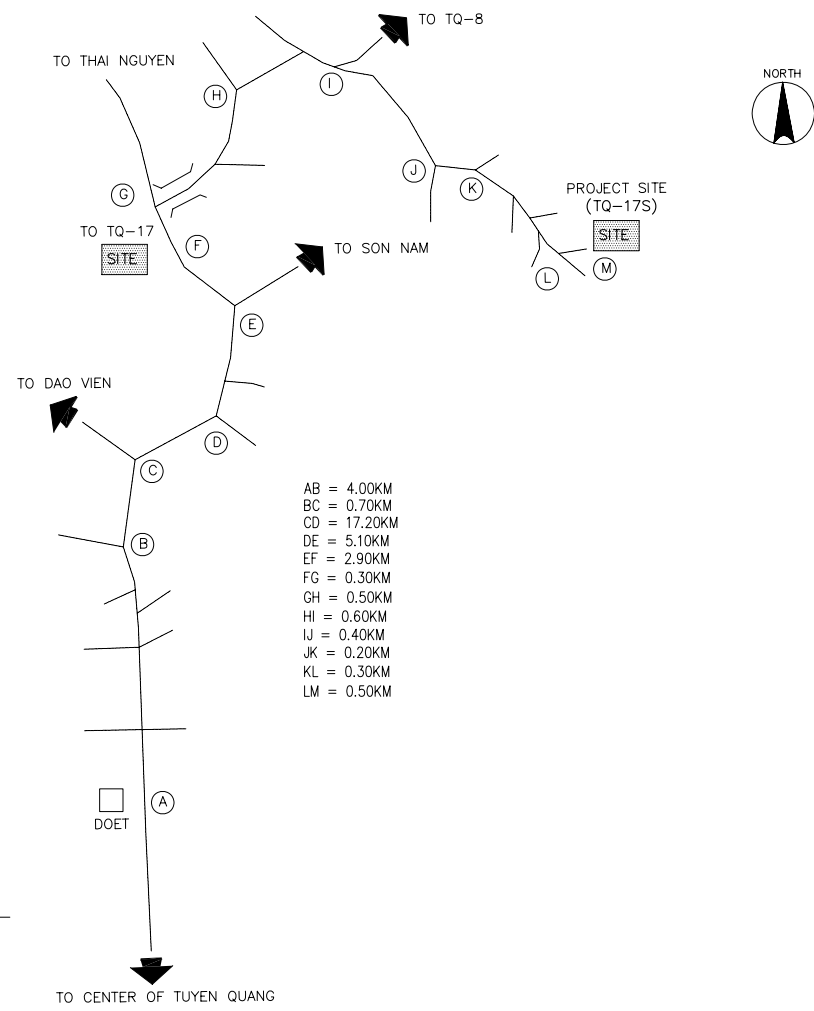


PROPOSED SITE PLAN
SCALE 1:600M

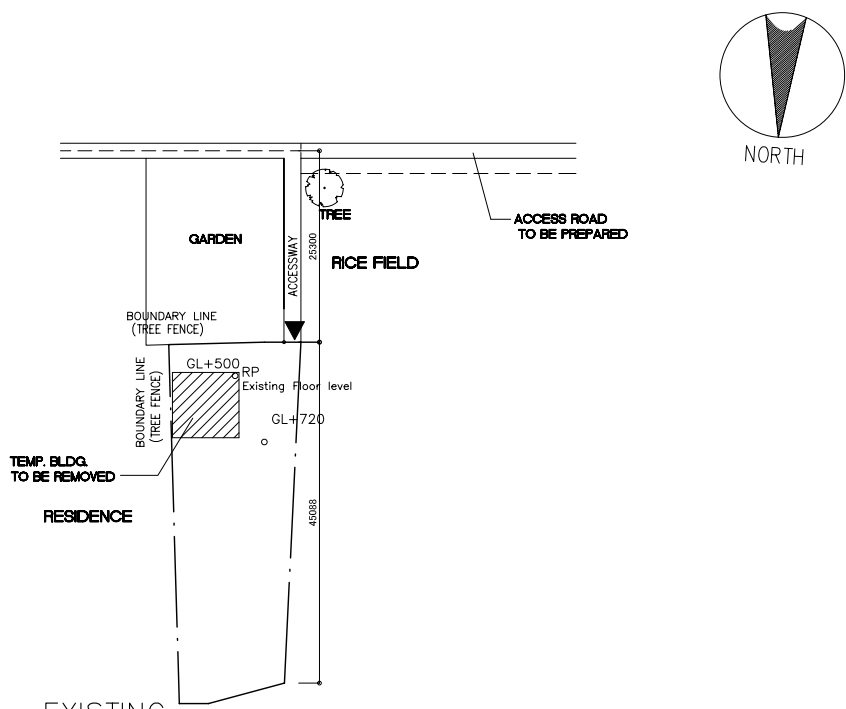
LEGEND:

CLRM	Class Room	MTG	Meeting Room	GH	Guard House	▲	Entrance
O	Office	TR	Teacher's Room	ST	Septic Tank	⊕	PUMP
L	Library	WT	Water Tank	⊙ W	Well	⊗	EWT
K	Kitchen	AD	Administration Office	⊙ EP	Electric Post	○	Percolation Pit
CONF	Conference Room	TH	Teacher's House				
MP	Multi Purpose Room	TA	Teaching Aid Room				
PR	Principal's Room	T	Toilet				
VPR	Vice Principal's Room	S	Storage				

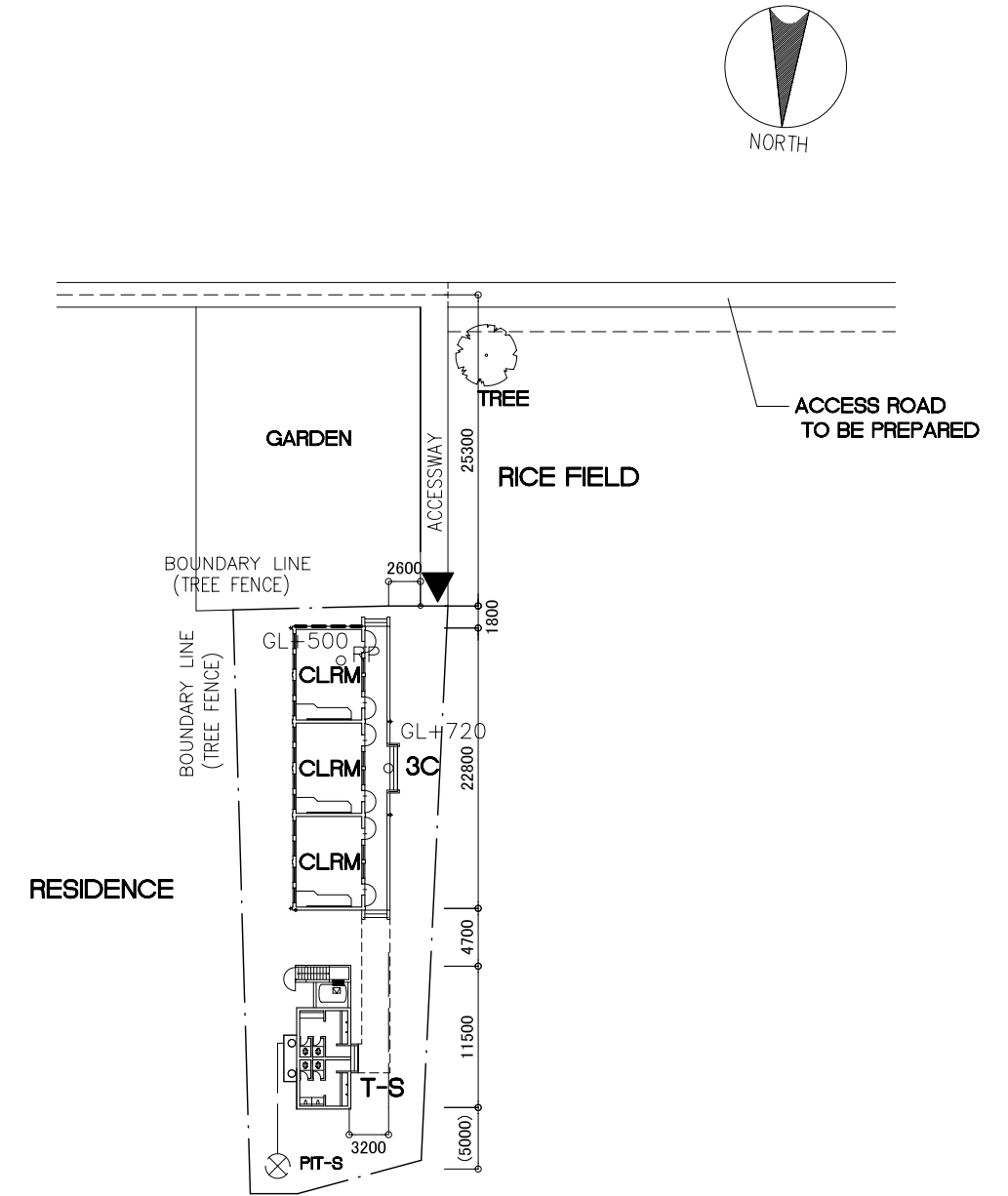
NAME OF SCHOOL	DANG CHAU PRIMARY SCHOOL			SCHOOL ID	TQ-17S
DIVISION	PROVINCE OF TUYEN QUANG	DISTRICT	SON DONG	DATE OF SURVEY	



VICINITY MAP
SCALE NTS



EXISTING SITE DEVELOPMENT PLAN
SCALE 1:1000M



PROPOSED SITE PLAN
SCALE 1:600M

LEGEND:

CLRM	Class Room	MTG	Meeting Room	GH	Guard House	▲	Entrance
O	Office	TR	Teacher's Room	ST	Septic Tank	□	PUMP
L	Library	WT	Water Tank	⊙	Well	⊗	EWT
K	Kitchen	AD	Administration Office	●	Electric Post	○	Percolation Pit
CONF	Conference Room	TH	Teacher's House				
MP	Multi Purpose Room	TA	Teaching Aid Room				
PR	Principal's Room	T	Toilet				
VPR	Vice Principal's Room	S	Storage				