

Application for Grants for Construction of
HYDRO THERAPY UNIT
in
Athma Special School
for Children with
Autism, ADHD, Mentally Retarded, Down Syndrome, Cerebral Palsy

Project Cost - 40,170 US\$

Application for Grants for Construction of
HYDRO THERAPY UNIT
in Athma Special School for Children with
Autism, ADHD, Mentally Retarded, Down Syndrome, Cerebral Palsy

1. Name of the Institution : Athma Education and Research Foundation (ARF)
2. Address - Reg. Office : 12B, 10th cross (East), Thillai Nagar,
Tiruchirappalli - 620 018, Tamilnadu, India
Ph. : 80125 22125, 98947 22221
e.mail : athmalayam09@gmail.com,
web. : athmalayam.org
School : Athma Special School (for Differently abled)
S.F. No. 817/12 to 18, Kulathur Village, Srirangam Taluk
Trichy - Dindugal Highways
Tiruchirappalli District, Tamilnadu, India
3. Established in the year : 2009
4. Registration No. & date : 983/09 dt. 19.08.2009
6. Income Tax Exemption No. : C.No. 6162E(39)/2011-12/CIT-I/TRY dt. 08/02/20/12
under 80-G / any other.
7. Objectives :
 1. To emerge as a centre which can answer all the queries and provide all the facilities needed for proper care and development of special children.
 2. To empower the differently abled person, if vocationally they fit for the job by vocational training programmes.
 3. To raise public awareness about child and adolescent mental health.
 4. To inculcate knowledge through education, including general, professional and other allied institutions from pre-school level upto the university level.
 5. To promote and encourage art, architecture, fine arts and athletics of sports like indoor and outdoor.
 6. To provide mental health training to psychology students, nursing students, research scholars and social work trainees.
 7. To organize and maintain lectures, seminars, conferences, symposiums and workshops for the purpose of inculcating civic sense and health rules and spiritual uplift and also for imparting non - formal and adult education.

8. To provide assistance in cash or in kind to poor and deserving students to peruse studies in institutions imparting higher education.
 9. To set up and help through endowments, orphanages for the poor, houses for the benefits of orphans and poor persons and awarding of scholarships and cash payments to poor persons and widows desirous of receiving a primary, secondary and/or higher education and/or research in any branch or branches of science in its widest sense.
 10. To support and engage with organizations engaged in similar activities.
 11. To promote enactment of legislation relating to matters concerning the mentally disabled, their rehabilitation and marginalized members of society.
8. Location & Area of operation : Urban & Rural
 9. Population covered or served : 15 Lakhs Population.
 10. Staff / Workers : Full Time - Administrator - 1 No.
Professional / Voluntary Physio Therapist - 1 No.
Full Time / Part - Time Special Educators - 4 Nos.
Technical / Administrative Speech Therapist - 1 No.
Assistants - 2 Nos.
Part Time - Yoga Therapist - 1 No.
Psychologist - 2 Nos.
Psychiatrist - 2 Nos.
Non Technical- Driver - 3 No.
Ayaas - 2 Nos.
Watchman - 2 Nos.
 11. Total value of assets or corpous fund, if any including landed / building property : Rs. 2,00,00,000/- (Building only)
2 acres land (donation) in value
Rs. 45,00,000/-
 12. Specific project proposal with its Budget for which grant is requested : Estimate : Rs. 28,11,920/-
(Details enclosed)
 13. Enclosures
 - a) Estimate of Hydro Therapy with Civil Works
 - b) Audited statement of accounts : Enclosed
for the last three years

Project Title : **Hydro Therapy Facility for Special Children**

Project Organisation : **Athma Education and Research Foundation (ARF)**
12B, 10th Cross (East), Thillainagar,
Tiruchirappalli - 620 018, Tamil Nadu, India

Introduction

Childhood is the phase of growth and development in human beings between infancy and adulthood. It is the most precious period in every one's life. More than one third of India's population is below the age of 18 years and approximately 40% of the Indian Population is children, making India the country with the highest number of child population in the world, around 440 million.

Cases of Autism, Attention Deficit Hyperactivity Disorder (ADHD), Mental Retardation (MR), Specific Developmental Disorders of Scholastic Skills, Pervasive Developmental Delay, Behavioral problems and so on are found in all the societies of the world. Globally, the prevalence of childhood disorder is estimated to be 30 per thousand. Almost 75% of the population diagnosed to have mild form of childhood disorders, while the remaining 25% have either moderate or severe form of childhood disorders.

According to the National Sample Survey Organization (NSSO), in 1991, out of 1000 children in the rural areas, 31 had some developmental delays, whereas in urban areas 9 out of every 1000 children were developmentally delayed. The survey was conducted on children within the age group of 0-14 years (Status of Disability in India-2000, RCI).

World Health Organization estimates that 10% of the world's population has some form of mental disability and 1% suffers from severe incapacitating mental disorders (WHO 1989). Community-based surveys conducted during the past two decades in India showed that the total prevalence of psychiatric disorder was around 5.8%. (Reddy & Chandrasekhar Indian J. Psychiatry 1998).

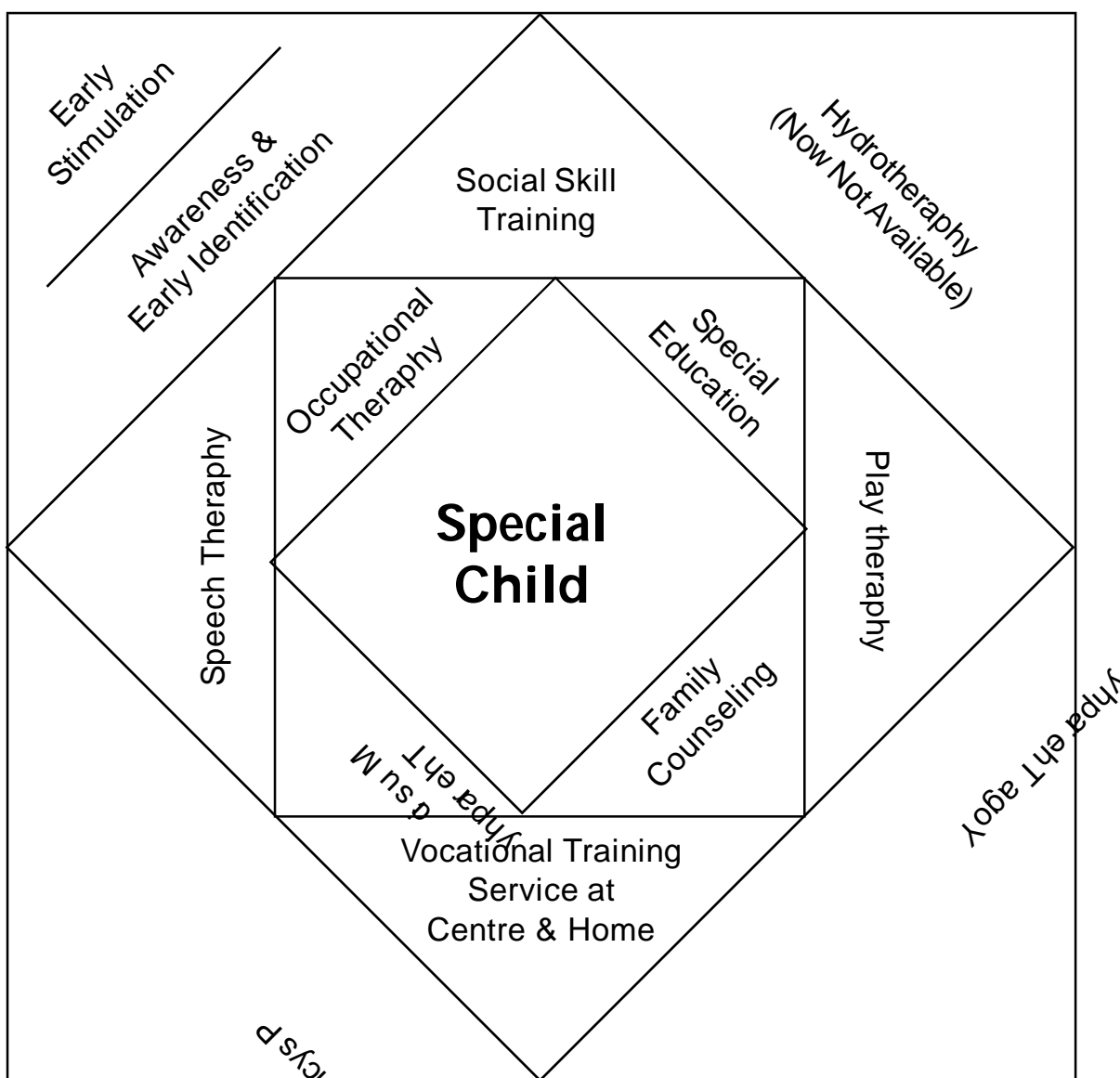
ATHMA Education and Research Foundation (ARF) is a non-profitable trust registered under Trust Act. ARF has been started to cater to the psychosocial needs of mentally challenged children in Tiruchirappalli region. There are many special children from the poor neighborhood who needed our care and there are no special schools for these children in rural areas. For this reason ARF has started ATHMA Special School in progress with 14 intellectually impaired children in the year 2009.

Children attending the special school are mostly from poor among the poor families. Many were not getting adequate attention to their problems from the family because of the ignorance of the parents and not able to afford special education. They are usually mild to severe affected children. However, the children show remarkable improvement in all aspects after started attending the ATHMA special school.

We have classified our students according to the nature of their mental retardation like mild/moderate/severe mental retardation, Specific learning disability, Down syndrome, Cerebral palsy, Autism, ADHD etc. and also on the basis of the progress achieved in attending to daily routine activities, etiquettes, conversation, group compatibility etc. We have further classified them according to their requirements of special case/need like speech problem, language problem, therapy, meningitis etc.

With the vision of providing dignified life and supportive environment for the mentally challenged children ATHMA is moving forward with dedication, determination and commitment to serve the needy children.

We have summarised the services provided in our school as follows :



Hydro Therapy

Defination

Hydrotherapy is a therapeutic whole-body therapy that involves moving and exercising in water, essentially physiotherapy in a pool.

Why Hydro Therapy

Evidence shows the use of water for therapy has been around for hundreds of years, as far back as 4500 B.C. and forms an integral part in many traditional medicine systems. This involves the use of cold, ice, hot, or steam water to relieve pain and promote physical well-being. The vital element of an ancient Roman culture was the bathhouses.

How it works

Hydrotherapy works on the healing properties of its thermal and/or mechanical effects. Hydrotherapy makes use of the body's reaction to the pressure exerted by the water, to hot and cold stimuli, to the sensation of the water itself, to the protracted application of heat.



Nerves help the sensation of the skin deeper into the body, it is then vital in stimulating the immune system, improving circulation and digestion, reduces the production of stress hormones, lessening the body's sensitivity to pain and encouraging the flow of blood.

How it works for the Special Children

Hydro therapy is one of the best environments for a child with special needs to improve physical functioning, especially if the child is not ambulatory. Although traditional physical therapy can be immensely effective in teaching children with Cerebral Palsy how to move, water has the added benefit of hydrating, oxygenating, and revitalizing the body's musculoskeletal system. The hydrostatic pressure of the water provides a blanket of deep pressure to the child's largest organ the skin.



Unique properties of the water allow children to work on developmental skills such as crawling, walking, rolling and jumping. Motor planning, self-regulation, speech, oral motor control, strength and coordination are just a few areas that are likely to improve as a result of therapy in the water.

Range of movement increases with repetition, stretching and balancing is more sustainable. More than 50% of body weight is water. Gravity and body weight affects the way the body moves.

Hydro therapy presents a near complete reversal of these. Water reduces a human's body weight by 90 percent, allowing children and adults to ambulate freely in a way that does not place undue stress on the musculoskeletal system from forces such as gravity and body weight.

Benefits

It helps children to

- # Improve Muscle Tone
- # Core Strength
- # Enhance Blood Circulation
- # Improve Cardiovascular Functioning
- # Improve Flexibility and
- # Reduce Muscle Spasticity.



It is the most precious period in every one's life. More than one third of India's population is below the age of 18 years and approximately 40% of the Indian Population is children, making India the country with the highest number of child population in the world, around 440 million.

A Research for Hydrotherapy for Children with Autism

There is more research supporting the goodness of water and exercise for calming behaviors and improving social skills in children with Autism.

Mortimer, Rachel & Privopoulos, Melinda & Kumar, Saravana. (2014). The effectiveness of hydrotherapy in the treatment of social and behavioral aspects of children with autism spectrum disorders: A systematic review. *Journal of multidisciplinary healthcare*. 7. 93-104. 10.2147/JMDH.S55345.



Autism spectrum disorders (ASDs) are increasing in prevalence. Children with ASDs present with impairments in social interactions; communication; restricted, repetitive and stereotyped patterns of behavior, interests, or activities; as well as motor delays. Hydrotherapy is used as a treatment for children with disabilities and motor delays. There have been no systematic reviews conducted on the effectiveness of hydrotherapy in children with ASDs.

We aimed to examine the effectiveness of hydrotherapy on social interactions and behaviors in the treatment of children with ASDs.

A systematic search of Cochrane, CINAHL, PsycINFO, Embase, MEDLINE®, and Academic Search Premier was conducted. Studies of participants, aged 3-18 years, with ASDs at a high-functioning level were included if they utilized outcome measures assessing social interactions and behaviors through questionnaire or observation. A critical appraisal, using

the McMaster Critical Review Form for Quantitative Studies, was performed to assess methodological quality.

Four studies of varying research design and quality met the inclusion criteria. The participants in these studies were aged between 3-12 years of age. The duration of the intervention ranged from 10-14 weeks, and each study used varied measures of outcome. Overall, all the studies showed some improvements in social interactions or behaviors following a Halliwick-based hydrotherapy intervention.



Few studies have investigated the effect of hydrotherapy on the social interactions and behaviors of children with ASDs. While there is an increasing body of evidence for hydrotherapy for children with ASDs, this is constrained by small sample size, lack of comparator, crude sampling methods, and the lack of standardized outcome measures. Hydrotherapy shows potential as a treatment method for social interactions and behaviors in children with ASDs.

https://www.researchgate.net/publication/260150338_The_effectiveness_of_hydrotherapy_in_the_treatment_of_social_and_behavioral_aspects_of_children_with_autism_spectrum_disorders_A_systematic_review.

Who will be Benefited ?

The hydrotherapy unit is **open to all children undergoing rehabilitation** in 30 special schools in Trichy and other special children of community based rehabilitation programme.

APPEAL :

Athma Special School is having two acres of land which is donated by a philanthropist. In that we have 15,000 sq.ft. of school building and 2000 sq.ft for open play area with sufficient play things.

We have planned the proposed a hydro therapy unit according to the guidelines given by specialists in the field. The basic budget works **28 Lakhs**, which cannot be accomplished by individuals.

Only noble minded people can help us to make our aim a reality where special children neglected by society at large & suffering parents can find a solace.

Breakup for the Project Cost

<i>Particulars</i>	<i>INR</i>	<i>US\$</i>
Civil work	21,70,000	31,000
Equipments	6,41,920	9,170
Total	28,11,920	40,170

Note : 1 USD = 70.000 INR

B.SRINIVASAN.B.E.,

SRI KRISHNA BUILDERS
TRICHY - 620 017

PHONE 9443125509

RR. COMPLEX, 6F ALLITHURAI ROAD , PUTHUR, TRICHY.17

ABSTRACT ESTIMATE

THIS ESTIMATE FOR PRO.CONSTRUCTION OF HYDRO THERAPY UNIT FOR
ATHMA SPECIAL SCHOOL , (ATHMA EDUCATION &RESEARCH FOUNDATION)
S.FO: 817, ENAMKULATHUR, TRICHIRAPPALLI. 620009

1	Earth work excavation for foundation up to a depth of 6'0" from ground level	325.00	Cu.M.	300.00	Cu.M.	97,500.00
2	Sand filling in foundation trench 1' clean river Sand.	87.00	Cu.M.	650.00	Cu.M.	56,550.00
3	Plain cement concrete mix 1:4:8 using hand broken granite metal 1'0" thick.	53.00	Cu.M.	3,200.00	Cu.M.	169,600.00
4	Reinforced cement concrete works with M20 mix using 20mm machine crushed baby jelly.	56.00	Cu.M.	17,000.00	Cu.M.	952,000.00
5	Brick work for superstructure with c.m 1:5 using chamber bricks for 9" thick walls.	23.00	Cu.M.	5,200.00	Cu.M.	119,600.00
6	Quality ceramic Swimming water proof tile flooring with quality adhesive chemicals	324.00	Sq.M	2,000.00	Sq.M.	648,000.00
7	Supplying and installtion of ss handrails allround and ladder with complete safety measurements					75,000.00
8	Supplying and installtion with a run of pvc conduit pipe wiring with 1/18 and 3/20 lighting purpose finolex wiring with modular switches and sockets			L.S.		50,000.00
9	Provision for unforeseen charges etc., complete			L.S.		1,750.00

TOTAL Rs. 2,170,000.00

TOTAL Rs. 21,70,000.00

(RUPEES TWENTY ONE LAKHS AND SEVENTY THOUSAND ONLY)

DATE :

PLACE : TRICHY.

CONSULTING ENGINEER

B.SRINIVASAN, B.E., M.A.,(Yoga)
CONSULTING CIVIL ENGINEER &
LICENSED BUILDING SURVEYOR
R.R. COMPLEX
6F, VAYALOORE ROAD
PUTHUR, TRICHY - 17
CELL : 9443125509

B.SRINIVASAN.B.E.,
SRI KRISHNA BUILDERS
TRICHY - 620 017

PHONE 9443125509

RR. COMPLEX, 6F ALLITHURAI ROAD , PUTHUR, TRICHY.17

DETAILED ESTIMATE

THIS ESTIMATE FOR PRO.CONSTRUCTION OF HYDRO THERAPY UNIT FC
 ATHMA SPECIAL SCHOOL , (ATHMA EDUCATION &RESEARCH FOUNDATIO
 S.FO: 817, ENAMKULATHUR, TRICHIRAPPALLI. 620009

S.NO	PARTICULARS	NO	L	B	D	QTY
1	Earth work excavation for foundation up to a depth of 6'0" from ground level					
	BASE	1	9.70	18.90	1.22	223.66
	For column foundation	14	1.52	1.52	1.83	59.19
	For column foundation	12	1.52	1.52	1.52	42.14
						325.00
					Say	325.00CU.M
2	Sand filling in foundation trench 1' clean river Sand.					
	For column foundation					
	BASE	1	9.70	18.90	0.31	56.83
	For column foundation	14	1.52	1.52	0.31	10.03
	For column foundation	12	1.52	1.52	0.31	8.59
		1	2.74	18.3	0.15	7.52
		1	2.74	9.15	0.15	3.76
						86.74
					Say	87.00CU.M
3	Plain cement concrete mix 1:4:8 using hand broken granite metal 1'0" thick.					
	BASE	1	9.70	18.90	0.15	27.50
	For column foundation	14	1.52	1.52	0.23	7.44
	For column foundation	12	1.52	1.52	0.23	6.38
		1	2.74	18.3	0.15	7.52
		1	2.74	9.15	0.15	3.76
						52.60
					Say	53.00CU.M
4	Reinforced cement concrete works with M20 mix using 20mm machine crushed baby jelly.					
	For column foundation footing	14	1.20	1.20	0.31	6.25
	Column up to base	14	0.23	0.23	1.98	1.47
	For column foundation footing	12	1.20	1.20	0.31	5.36
	Column up to base	12	0.23	0.31	2.50	2.14
		1	9.15	18.3	0.10	16.74
	RCC WALL	1	54.90	0.23	1.50	18.94
	RCC BEAM	1	64.60	0.23	0.31	4.61
						55.50
					Say	56.00CU.M

5	Brick work for superstructure with c.m 1:5 using chamber bricks for 9" thick walls.	1	64.60	0.23	1.50	22.29
						22.29
					Say	23.00CU.M
6	Quality ceramic Swimming water proof tile flooring with quality adhesive chemicals					
	Swimming pool base floor	1	9.15	18.30		167.45
	pavement flooring	1	2.74	18.3		50.14
		1	2.74	9.15		25.07
	wall	1	54.00	1.5		81.00
						323.66
					Say	324.00 Sq.M
7	Supplying and installation of ss handrails allround and ladder with complete safety measurements					L.S.
8	Supplying and installation with a run of pvc conduit pipe wiring with 1/16 and 3/20 lighting purpose					L.S.
	finolex wiring with modular switches and sockets					L.S.
9	Provision for unforeseen charges etc., complete					L.S.

DATE :
PLACE : TRICHY.

CONSULTING ENGINEER



B.SRINIVASAN, B.E., M.A.,(Yoga)
CONSULTING CIVIL ENGINEER &
LICENSED BUILDING SURVEYOR
R.R. COMPLEX
OFF. VAYALOOORE ROAD
PUTHUR, TRICHY - 17
CELL : 9443125509

HI-TECH POOLS

Mfrs. of : SWIMMING POOL, WATER TREATMENT & STEAM BATH EQUIPMENTS
 # 6/12, Ramaiah Street, Shenoy Nagar, Chennai - 600 030.
 E-mail : hitech.pools@yahoo.com

Date: 27-10-2018

To
 M/s. Athma Special School,
 Enamkulathur,
 Trichy-620009.

Dear sir,

Quotation for Swimming Pool Equipments
 Pool size: 60' * 30' * 2' - 4.6' (Overflow Type)
 Pool holding water capacity 2,00,000 Litres

S.No.	Description	Qty	Amount
1.	Swimming Pool Fibre Filter 1200mm (Emaux/ Equalent make) with M.P.Valve and fittings. Each Rs.95,000/-	2 Nos	1,90,000.00
2.	Filter media (Silex Sand) Rs.15/kg	2000kg	30,000.00
3.	Filter Pump 5HP Monobloc (Kirlosker make) with foot valve and starter Each Rs.32,000/-	2 Nos	64,000.00
4.	Pre filter S.S Body 8" * 12" 304 grade with mesh and fittings	2 Nos	30,000.00
5.	Control valves, NRV, Pipe and fittings	L.S	12,000.00
6.	Ladder SS 304 grade 38 O.D with 3 steps Each Rs.15,000/-	4 Nos	60,000.00
7.	Inlet Nozzle Each Rs.1000/-	20Nos	20,000.00
8.	Pool Drain	1 No	3,000.00
9.	Suction Sweeper (Trolley Model) with 1 HP Dewatering Pump (Kirlosker make), S.S. Suction head, Hose 20 mtrs, Starter, 20mtrs cable and fittings	1 set	35,000.00
10.	Material Transporting charges	L.S	25,000.00
11.	Equipments Erection, Commissioning and Testing Charges	L.S	75,000.00
12.	TAX GST 18%		97,920.00
	Total Amount		6,41,920.00

(Rupees Six lakhs forty one thousand nine hundred and twenty only)

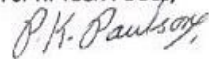
Terms and Condition:

1. Payment 75% advance against Purchase and work order, 25% after completion of work.
2. Period of work 20 to 30 days
3. Guarantee Our equipments are guaranteed for period of 1 year from the date of commissioning.

Note: Civil, Electrical and Plumbing work are with your scope

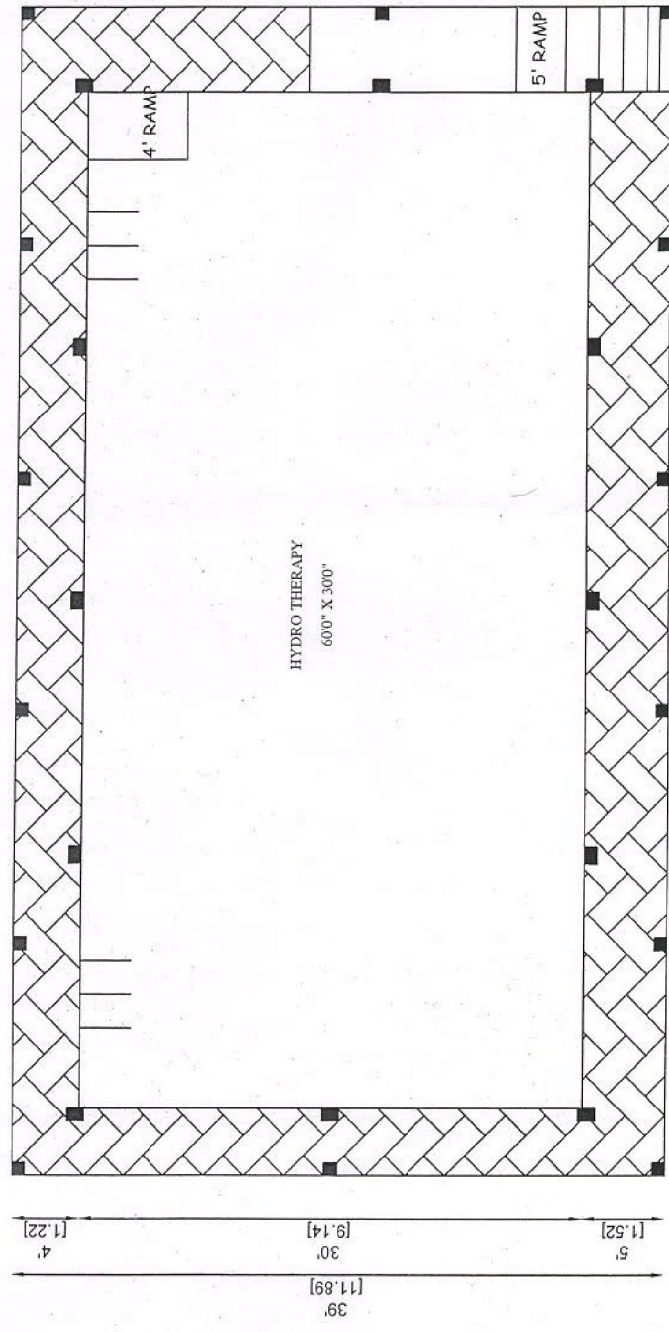
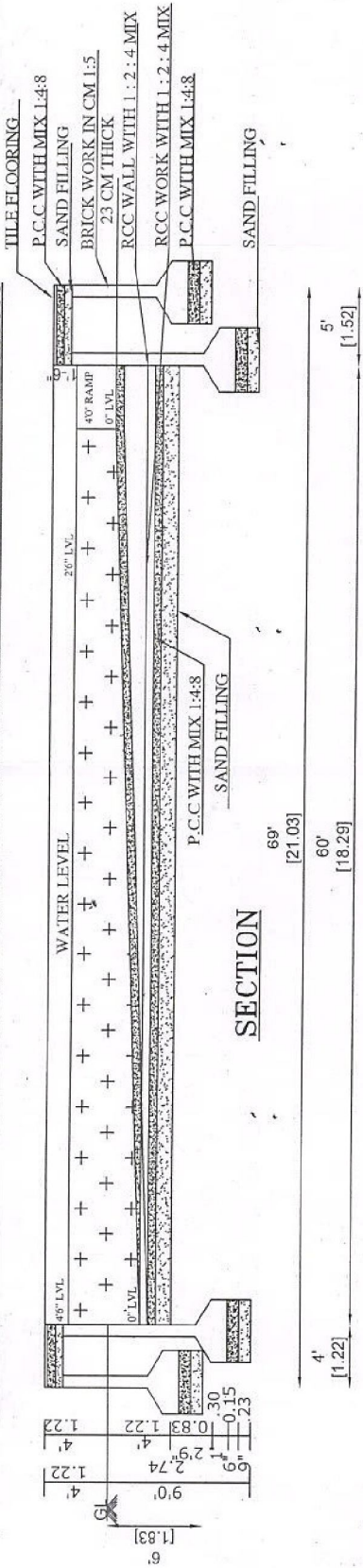
Yours faithfully,

For HI-TECH POOLS,



(P.K.PAULSON)

*** PLAN SHOWING THE PROPOSED CONSTRUCTION OF HYDRO THERAPY UNIT, FOR ATHMA SPECIAL SCHOOL
(ATHMA EDUCATION & RESEARCH FOUNDATION) S.F. NO: 817, ENAMKULATHUR, TRICHIRAPPALLI. 620009**



AREA DETAILS		
AREA	SQ.FT	SQM
HYDRO THERAPY AREA	1800.00	167.22

LICENSED SURVEYOR.

B. Srinivasan

B. SRINIVASAN, B.E., M.A., (Voss)
CONSULTING CIVIL ENGINEER &
LICENSED BUILDING SURVEYOR
R.R. COMPLEX
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PATTINCHI - 17
CELL: 9445126909

PLAN
SCALE: 1:100