City of Newton

Setti D. Warren
Mayor

Newton, Massachusetts Community Preservation Program
FUNDING REQUEST

(For staff use)
date rec'd:
22 August 2013

[X] **PRE-PROPOSAL** [ ] **PROPOSAL**

Form last updated April 2013.

For full instructions, see **www.newtonma.gov/cpa** or contact:

Community Preservation Program Manager,
City of Newton Planning & Development Department, 1000 Commonwealth Ave., Newton, MA 02459
aingerson@newtonma.gov 617.796.1144

You may adjust the space for each question, but the combined answers to all questions on this page must fit on this page.

Project TITLE	**Restoration of Farlow Park Pond and Bridge**			
Project LOCATION	Full street address (with zip code), or other precise location. 129 Church Street, Newton, MA			
Project CONTACTS	Name & title or organization	Email	Phone	Mailing address
Project Manager	Carol Schein, Open Space Coordinator	cschein@newtonma.gov	617-796-1500	Parks and Recreation 124 Vernon Street Newton, MA 02458
Other Contacts	Robert DeRubeis, Commissioner	bderubeis@newtonma.gov	617-796-1500	Parks and Recreation 124 Vernon Street Newton, MA 02458
Project FUNDING	**CPA funds requested:** $565,779	Other funds to be used: $ 11,000	Total project cost: $576,779	
Project TheSUMMARY	Summarize the project's main tasks, components or features, and explain why it is eligible for CPA funds. You may provide more information in attachments, but your SUMMARY MUST FIT IN THE SPACE BELOW.			

Architect George Meacham, designer of the Boston Public Garden, designed Farlow Park, Newton's first park, in 1883. At the center of this 3-3/4 acre picturesque park with meandering pathways lined with trees, iron light poles and seating areas was an Adirondack-style bridge that crossed a naturalistic pond used by some for wading and skating. By the mid 1900s significant changes had occurred: 1/3 of the park was fenced off and designated as an active playground for small children; the bridge was removed and replaced with a concrete slab and chain link fencing, and the pond was drained and filled with loam and seed. Since 2004 it has been the goal of Newton Parks and Recreation and the Friends of Farlow Park to safeguard this cultural landscape for future generations by restoring its grandeur, the primary objective being to bring back the reflecting pond and bridge. This historic-designed landscape, with its designation on the National Historic Register as the focal point of the Newton Corner Historic District, fits the CPA-definition of a historic preservation project. As such, all work will comply with the federal standards for the Treatment of Historic Properties, as well as the Americans with Disabilities Act and AASHTO's design guidelines for pedestrian bridges.

To date, the CPC has spent $92,000 in total, for a 2006 landscape restoration report (including feasibility studies for the bridge and the pond), the digging of an on-site well, a pond safety study, design and construction documents for restoration of the pond's concrete basin and an irrigation system for the playground. In the end, the final project will save the City $4000 annually, as the irrigation water source will be switched from Underwood School to that of the park's new well.

As is necessary for a project of this complexity, an independent project manager will be utilized, with oversight by Parks and Recreation. The Friends of Farlow Park, project co-sponsor, is a group of Newton Corner residents who have been together since 2004. As members of the Newton Corner Neighborhood Association they have supported a number of public-private projects in Newton Corner over the years. With a long-term operations and maintenance plan to be in place for the pond and bridge, the Friends intend to form a Citizen's Group to perform the requisite maintenance on a regular basis.

The scope of work, enlarged to now include the bridge, will in the end result in a more cohesive and cost-effective design. The restoration of Farlow's bridge and pond together will reinforce the park's "sense of place" while providing for a beautiful, accessible and restful public space for all in the community to enjoy.

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Project TITLE	**Restoration of Farlow Park Pond and Bridge**

USE of CPA FUNDS		HISTORIC RESOURCES	OPEN SPACE	or	RECREATION LAND	COMMUNITY HOUSING
Check all that apply.	acquire					Contact staff for separate form.
	create	not allowed				
	preserve					
	rehabilitate/ restore	X	Consult staff.			

COMMUNITY NEEDS From at least 2 of the community-wide plans linked to *Guidelines & Forms* from **www.newtonma.gov/cpa**, provide the plan title, year, page number and a brief quote showing how this project meets needs already recognized in these plans. You may also list other community benefits not mentioned in any plan.

Newton Comprehensive Plan (November 2007)*:* "Identify historic places, both architectural and natural, that give the community its special character and that aid its future well-being."

Newton's Heritage Landscapes (May 2009)*,* Page 8, *Building a 19th Century "Garden City":* "Tree planting in village centers, creation of a garden cemetery, and picturesque landscaping of large estates set the City's tone. Creation of Farlow Park and the Newton Centre Playground established a pattern of commitment to beautification."

draft *Open Space Plan 2013-2017,* Page 44*:* "Our open space and recreation vision is of being a metropolitan community able to maintain and preserve its natural assets and resources and able to meet both the passive and active recreational needs of its citizens. In such a vision, the well-being of Newton residents is promoted by policies that safeguard Newton's land, air and water. Our parks, conservation areas and playgrounds can continue to provide opportunities for active and passive recreation through cooperative efforts—all ingredients of a vital community." Page 56: "The remainder of Newton's water bodies although small, contribute to wildlife habitat, open space, and to Newton's visual quality."

COMMUNITY CONTACTS List 3 Newton residents or organizations that can comment on the project and its manager's qualifications. No more than 1 of these contacts should be a Board member, supervisor, employee or current work colleague of the project manager. Formal letters of support may also be attached but are not required.

Name & title or organization	Email	Phone	Mailing address
Keith Jones, Chair, Friends of Farlow Park	Keith.Mjones@Verizon.net	928-3343	109 Vernon Street Newton, MA 02458
Jay Walter, Friends of Farlow Park	entasis@rcn.com	527-8383	83 Pembroke Newton MA 02458
Andy Gluck, Friends of Farlow Park	Gluckers@aol.com	965-4097	19 Merton Street Newton MA 02458

NON-CPA FUNDING	Source of funds	Amount requested	Date of funding decision (confirmed or expected)
	City of Newton CDBG funds recommended by Newton Corner Advisory Committee	$10,000	Confirmed
	Newton Corner Neighborhood Association	$1000	Confirmed

You may adjust the space for each question, but the combined answers to all questions on this page must fit on this page.
Especially for pre-proposals, use only as many lines as needed to give a broad overview of your project.
Full proposals must also include a full, detailed budget in addition to this page.

Project TITLE	**Restoration of Farlow Park Pond and Bridge**		
Project BUDGET	**USES of Funds** (major expense categories)	**SOURCES of Funds** (CPA & others)	
CAPITAL/DEVELOPMENT COSTS			
See back-up for detailed cost information			
Independent Project Manager – project start-up through final completion	$56,000	CPA	$56,000
New bridge – design and construction	$238,619	CPA	$238,619
Pond basin and irrigation system – construction	$282,160	CPA	$271,160
		CDBG	$10,000
		Newton Corner Neighborhood Assoc.	$ 1000
TOTAL	**$576,779**	**TOTAL**	**$576,779**
ANNUAL OPERATIONS & MAINTENANCE (cannot use CPA funds)			
Electricity	$690	City general fund budget	$ 690
TOTAL	**$ 690**	**TOTAL**	**$ 690**

Project TIMELINE	**Phase or Task**	**Notes** (required fundraising, permits, bidding, etc.)	**Season & Year**
Construction documents are in hand for the pond, well, and irrigation system from previous phase. Refer to http://www.newtonma.gov/gov/planning/cpa/projects/farlow.asp			
	RFP/contract with independent project manager		Spring 2014
	RFP/contract with PE firm to design bridge, develop final construction documents and incorporate with pond construction documents; followed by bid and construction phases for entire project		Spring 2014
	Four-month bridge design/bid phase		Summer 2014
	Three-month construction phase for bridge, pond and irrigation		Spring 2015

Pre-proposals may OMIT this page & all attachments except those in **red.**

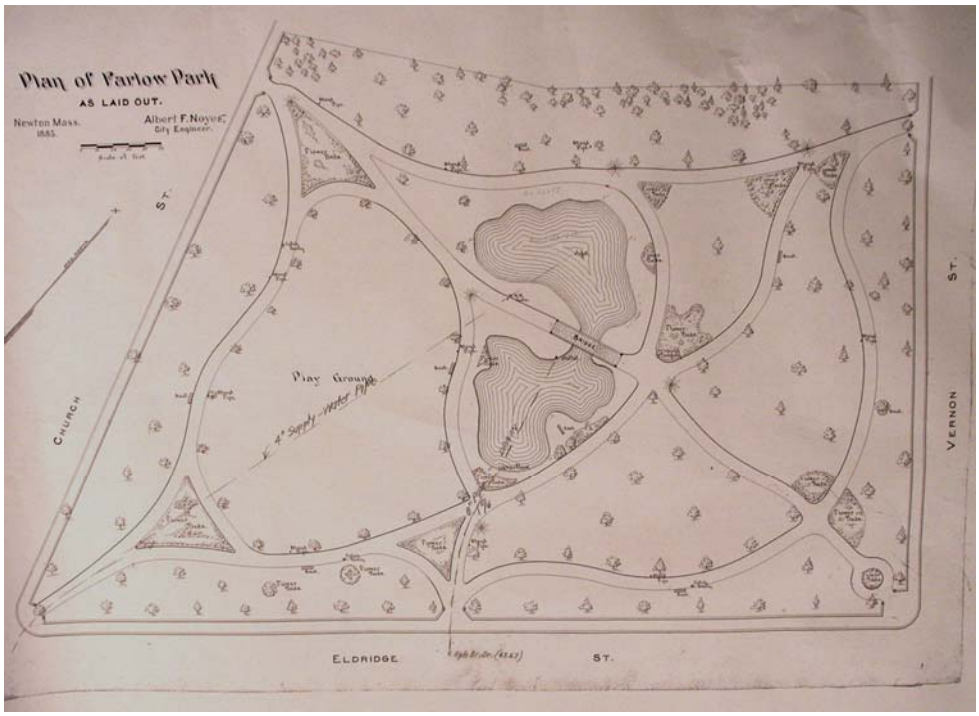
Project TITLE	**Restoration of Farlow Park Pond and Bridge**

Required or Optional?	Check if included	Attachment Title & Description
REQUIRED for all proposals	X	**PHOTOS** of existing site or resource conditions (2-3 photos may be enough)
	X	**MAP** of site in relation to nearest major roads (omit if project has no site)
		PROJECT FINANCES printed and as computer spreadsheets, with both uses & sources of funds
		development pro forma/capital budget: include total cost, hard vs. soft costs and contingencies, and project management – amount and cost of time from contractors or staff (in-kind contributions by existing staff must also be costed)
		10-year annual operating & maintenance budget (CPA funds may not be used here)
		non-CPA funding: commitment letters, letters of inquiry to other funders, fundraising plans, etc., including both cash and est. dollar value of in-kind contributions
		purchasing of goods & services: short email or letter summarizing sponsor's understanding of applicable statutes (MGL ch. 30, 30B and/or 149) and City policies
		SPONSOR FINANCES & QUALIFICATIONS
		for sponsoring department or organization, most recent annual operating budget (revenue & expenses) **& financial statement** (assets & liabilities); each must include both public (City) and private resources ("friends" organizations, fundraising, etc.)
		for project manager: relevant training & track record of managing similar projects
OPTIONAL for all proposals	X	**LETTERS of SUPPORT** from Newton residents, organizations, or businesses (2004-07 ltrs re-submitted August 2013 are posted separately on CPC website)
REQUIRED for all proposals that involve City govt., including real estate acquisitions		**CAPITAL IMPROVEMENT PLAN** current listing/ranking & factors for this project
		COVER LETTER from head of City department, board or commission confirming: current custody, or willingness to accept custody, of the resource and commitment of staff time for project management
REQUIRED for all historic resources proposals		**HISTORIC SIGNIFICANCE** **see separate instructions for 3 required attachments** analyzing significance and showing how project meets national preservation standards
REQUIRED for all proposals involving real estate acquisition, construction or improvements Consult staff to confirm requirements for each project.		**SITE CONTROL, VALUE & DEED RESTRICTIONS**
		legally binding option, purchase & sale agreement or deed
		appraisal by an independent, certified real estate appraiser (the CPC may also commission its own, separate appraisal)
		owner's agreement to a permanent deed restriction (for affordability, historic preservation or land conservation)
		ZONING & PERMITTING
		short email confirmation of review by the **Development Review Team** (DRT)
		brief property history: at least the last 30 years of ownership & use
		environmental mitigation plans (incl. lead paint, asbestos, underground tanks)
		zoning relief and permits required (incl. parking waivers, demolition or building permits, comprehensive permit or special permit)
		other approvals required (Newton Conservation Commission, Newton Historical Commission, Newton Commission on Disabilities, Massachusetts Historical Commission, Massachusetts Architectural Access Board, etc.
		DESIGN & CONSTRUCTION
		professional design & cost estimates: include site plan, floor plans & elevations
		materials & finishes; highlight "green" or sustainable features & materials

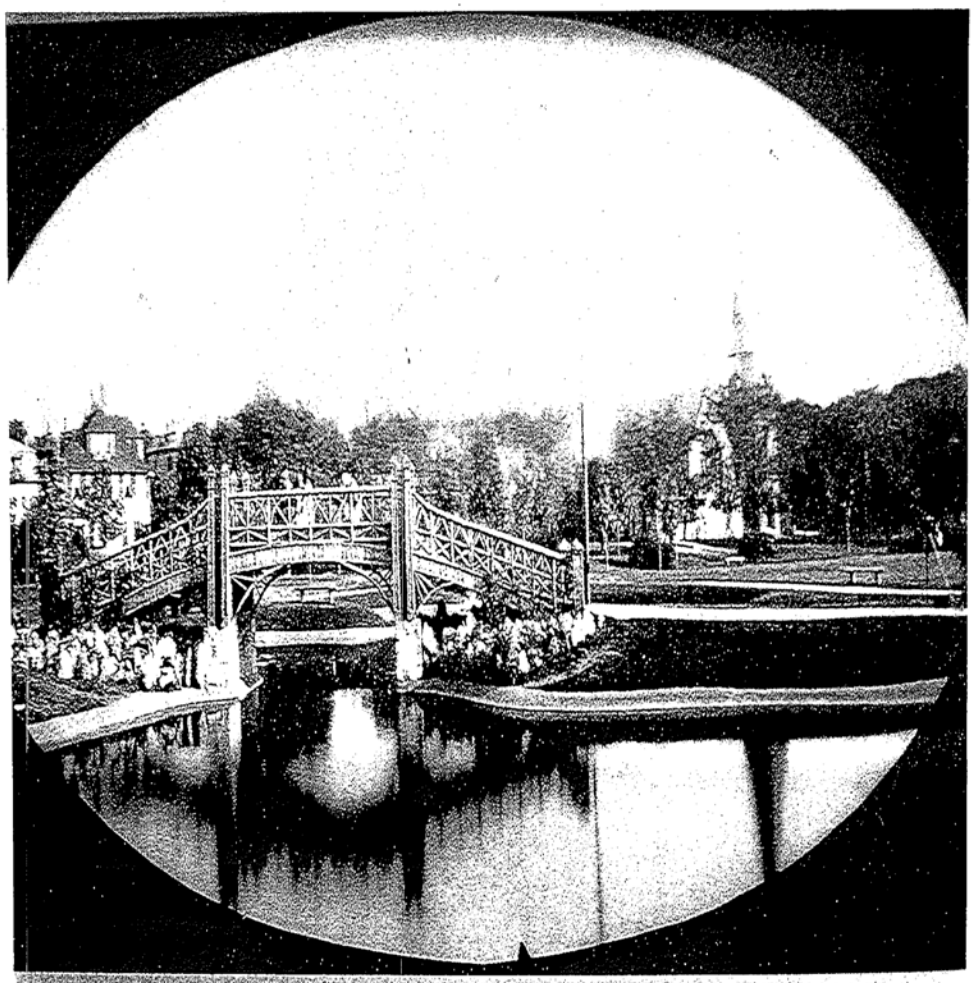
Location of Farlow Park

Images of Farlow Park Pond and Bridge, ca. 1900-1930

Original plan
for Farlow Park, 1885



Farlow Park in 1888



w Park, Newton Corner, is seen here in 1888, shortly after the landscaping had be
pleted

Farlow Park
in the 1880s

Farlow Park
pond & bridge

in 2007 (at left)

during 2010
exploration of pond
basin condition &
drilling for potential
pond water supply
(below)

August 20, 2013
Restoration of Farlow Park Pond and Bridge
Pre-proposal #2 - Costs provided by Weston & Sampson, 8/19/13 email
Fee for an Independent Project Manager

Part A- Bridge Design and Overall Project Bidding (3 Months)

- Procure a structural engineering consultant
- Attend public hearings
- Coordinate with city/consultant representatives
- Oversee design development and bid document package preparation for the bridge component
- Integrate bridge package with original Farlow Pond bid package
- Coordinate bidding of the project, attend pre-bid meeting, respond to inquiries and issue addenda as required
- Other work as required

12 weeks x 16 hrs/week average x $125 per hour = $24,000

Part B- Construction Administration and Oversight (4 months)

- Weekly on-site meetings with city/consultant/contractor
- Meeting notes and other project correspondence
- Coordinate shop drawing reviews and approvals, pay applications, change orders, other basic project related communications and authorizations
- Regular site visits to observe construction activity (2 site visits per week at 3-4 hours per visit)
- Other work as required

16 weeks x 16 hrs/week average x $125 per hour = $32,000

Total Part A + Part B = $56,000

Cost Estimate for Farlow Pond/Irrigation System							
(Weston and Sampson 2011)	**units**	**quantity**	**unit price**	**total**	**subtotal**	**total (2011)**	**total (2013)**
							(adjusted for 3% inflation)
general conditions							
general conditions		0.08	$ 255,935	$ 20,475			
tree protection	each	17	$ 200	$ 3,400			
					$ 23,875		
demolition/site preparation							
earth fill removal in concrete pool liner	cu yards	780	$ 45	$ 35,100			
					$ 35,100		
drainage structures/infrastructure							
new catch basin	ea	1	$ 4,500	$ 4,500			
overflow inlet at pond edge	ea	1	$ 2,500	$ 2,500			
new manhole	ea	1	$ 4,500	$ 4,500			
Frame and Cover	ea	1	$ 560	$ 560			
Frame and Grate	ea		$ 600	$ 600			
drainage gate valve	ea	1	$ 1,500	$ 1,500			
Drainage pipe	lf	125	$ 50	$ 6,250			
					$ 20,410		
utility services/mechanical equip.							
electrial service connection/cabinet	lf	1	$ 9,000	$ 9,000			
(1) well pump (1) aerator (1) water level	ls	1	$ 25,000	$ 25,000			
new irrigation system	ls	1	$ 35,000	$ 35,000			
30' of pipe from pump to pond	lf	30	$ 50	$ 1,500			
					$ 70,500		
general site improvements							
loam & seed of disturbed areas	LS	1	$ 15,000	$ 15,000			
					$ 15,000		
Concrete Restoration-Pond							
Concrete Partial Depth Repair	SF	450	$ 20	$ 9,000			
Concrete Full Depth		250	$ 30	$ 7,500			
Crack Repair--routing and Sealing	SF	280	$ 20	$ 5,600			
Crack Repair-Gravity Filling	LF	280	$ 35	$ 9,800			
Crack Repair-Polyurethane Injection	LF	200	$ 150	$ 30,000			
Epoxy Pond Liner System	LS	1	$ 15,000	$ 15,000			
					$ 76,900		
subtotal						$ 241,785	
contingency (@ 10%)						$ 24,178	
Total for Farlow Pond						**$ 265,963**	**$ 282,160**
Cost Estimate for Utilities							
Yearly Maintenance Costs							
electrical service for pump (irrigation)	annual	1	$ 300	$ 300			
electrical service for pump (pond)	annual	1	$ 100	$ 100			
fall cleanout (resp. local community)	annual			$ -			
spring start up/winter shut down	annual			$ 250			
subtotal						$ 650	$ 690

Cost Estimate for Farlow Bridge	2006 Estimate	2013 Updated Estimates		SUBTOTAL	**TOTAL**
(Amman and Whitney 2006)					
Estimated Design and Construction Costs					
Precast Concrete Rigid Frame with Stone Veneer	$ 128,000	$ 157,424	updated at 3% inflation per year		
Schematic Design	$ 7,000	$ 8,609	updated at 3% inflation per year		
Preliminary Design	$ 12,000	$ 14,758	updated at 3% inflation per year		
Contract Bid Documents	$ 21,000	$ 25,827	updated at 3% inflation per year		
Sub-surface exploration	$ 4,000	$ 6,000	2013 projected cost		
Bridge Removal		$ 20,000	2013 projected cost		
Additional Railing for 2013 Bridge Design		$ 6,000	2013 projected cost		
Total Bridge Cost Estimate				**$ 238,619**	
Cost Estimate for Independent Project Manager					
3 months of design and bid for the bridge		$ 24,000			
4 months construction administration (bridge, pond, and irrigation system)		$ 32,000			
Total Cost Estimate for Project Manager				**$ 56,000**	
Cost Estimate for Pond					
Total Cost Estimate for Pond				**$ 282,160**	
TOTAL OF CONSTRUCTION COSTS FOR POND, BRIDGE, IRRIGATION SYSTEM WITH PROJECT MANAGER					**$ 576,779**
Cost Estimate for Utilities					
Total Costs for Annual Utilities					**$ 690**
					per year

Performance Specification
Farlow Park Pond Irrigation and Pond Water Supply Project

General: The purpose of the project is to install a new submersible well pump maximum 5 horsepower, capable for pumping 25 gallons per minute at 50 psi to the irrigation system. The new well pump will be set approximately 350 feet deep in the existing Farlow Pond Well.

The following items will be provided:

One well pump:

5 Horsepower, 208 volt 3 phase motor sized for VFD Service
304 stainless steel well pump
25 gpm at 415 feet TDH

Well level sensor

Shall de-energize pump motor if water inside well casing drops to 10 feet above well pump assembly. Provide 1 inch conduit to Well Controller with instrumentation wiring.

Drop Pipe and Pitless Adapter

Provide 2 inch Drop Pipe and 2 inch pitless adaptor. Provide two ¾ inch pipes, two ¾ inch valves and valve boxes and 2 inch isolation gate and valve box with t wrench extension to ground surface to allow use of air to winterize well drop pipe and 2 inch pipe to irrigation system.

Pipe to Irrigation System

Install 2 inch pipe from Well to Irrigation system (located adjacent to Pump Control Cabinets). Materials and methods to comply with Specification 02810.

Variable Speed Control

Provide variable speed pump controller to convert single phase supply power to 3 phase power supply for new well pump. Provide lightning protection for VFD. VFD Fail status shall energize external alarm light.

PLC Controller

Provide PLC based controller to:

Energize de energize well pump
Shut down well pump based on well drawdown
Shut down pump based on loss of water pressure (20 psi initial set point)
Provide control signal to well VFD to supply constant pressure to Irrigation system (initial set point 50 psi).

To energize irrigation system when called for by time clock (provide filed adjustable setting for irrigation time clock) and allowed by time clock, temperature sensor (initial well pump lock out setting of 40 F) and rain sensor gauge.
Control solenoid valve to irrigation system
Energize well pump to fill Farlow Pond when called for by low pond level sensor and to de energize the well pump when high level sensor is energized.
Irrigation setting shall take precedence over pond filling function.
Control solenoid valve for well water flow to Farlow Pond. Provide backpressure valve if required for proper well pump VFD operation.
Pump or system fail shall energize external alarm light.
PLC supplier shall coordinate with well pump start signals from the irrigation system controller.

Pond Level Sensors

Provide two water level sensors for high and low level water sensing in pond. Provide low voltage wiring to PLC Controller. General Contractor to provide stainless steel pipe anchored to pond bottom and bridge to attach the pond level sensors.

VFD and PLC Cabinets

Provide separate 304 stainless steel cabinets for VFD and PLC controller. Provide external heat sink and fan for cooling VFD and PLC. Provide lockable cabinets with yellow alarm light on top of each cabinet. Provide custom engraved sign with instructions for department to call in event of alarm. Provide special isolated ground grid for VFD and PLC. Provide lightning protection for VFD/PLC Cabinets. Provide shop drawings for internal wiring of VFD/PLC Cabinet.

Irrigation System Control and Cabinet

The irrigation control system provided by Specification Section 02810 will require a 20 amp single phase power connection. All other wiring, zone valves and controls associated with the irrigation will be provided by Section 02810. The Irrigation Contractor shall be responsible for integrating well pump start signals with the Well Pump VFD PLC.
Irrigation Cabinet shall be located adjacent to Well Pump VFD and PLC Cabinets.

Commissioning, Training and Operation and Maintenance Manuals

After irrigation and pond filing system has been started up and operating without failure for 5 days, provide 4 hours on site training for OWNER's staff. Provide three (3) copies of O&M Manuals for all components including wiring drawings.