



VINCENT A. DiIORIO, INC.

Norwood Airport Business Park

89 Access Road, Suite 18

Norwood, Massachusetts, 02062

February 13, 2018

Town of Chilmark
401 Middle Road, PO Box 119
Chilmark, MA 02535
Tim Carroll Executive Secretary
execsec@chilmarkma.gov

RE: New Service, Distribution System and Marina Pedestals
Menemsha Basin Marina
Basin Road
Chilmark, MA

SUBJECT: Electrical Fee Proposal

Dear Tim,

It was a pleasure meeting with you and the other members of the group to discuss the existing conditions at Menemsha Basin Marina. As I indicated during our meeting last Friday, there is no ground fault protection at any of the existing pedestals along the Basin Road dock and the newer concrete floating dock. There is also no ground fault protection at the Main Distribution Panel (MDP) adjacent to the gas station building or in the sub-feed power panel within the enclosure that feeds the pedestals on the newer dock.

The existing MDP that is fed from the overhead utility lines is in disrepair and is showing a large amount of deterioration due to exposure to the salt air and sea spray. Modifications also need to take place at the sub-feed pedestal that would include ground fault protection and the proper grounding.

This office is pleased to provide the Town of Chilmark with an electrical fee proposal for the new service and distribution system for the docks at the Menemsha Basin Marina.

Our proposal is based on the scope of work outlined during our site visit of Friday February 9, 2018. If the actual scope of work differs from that identified in the above mentioned documents we would request an opportunity to revisit our proposal.

Our design would include meeting with representatives from the Town of Chilmark, the wiring inspector Cole Power of Powers Electric and other pertinent project people to discuss the program needs and concerns with the proposed design.

It is my understanding, that our engineering efforts should include a complete Electrical design that meets the intent of Article 555 "Marinas, Boatyards, Commercial & Noncommercial Docking Facilities" of the 2017 National Electric Code that would include the following:

- Site assessment
- New 120/240 volt, single phase service conduits and trenching from pole mounted utility company transformers
- New pad mounted Stainless Steel enclosure, pad and grounding located a minimum of 2'-0" above the highest tide level
- New underground secondary service conductors
- Coordination of the service and metering with Utility Company representatives
- Duct bank detail indicating size and quantity of conduit, fill, grounding, warning tape and cover
- New Main Distribution Panel (approximately 400-amps)
- New sub-feed distribution panel, pad and grounding located a minimum of 2'-0" above the highest tide level
- New feeders and branch circuit wiring for new parking area and floating dock pedestals
- Each outlet on each pedestal will be fed with an individual branch circuit
- New ground fault pedestal mounted outlets will be installed every 50'-0" on center along the commercial dock
- Grounding System for all system components will include but not be limited to; enclosure steel, enclosure foundations, installed within duct banks and equipment ground conductors, etc.



- All wiring permanent wiring on the underside of the piers or where flexibility is required due to floating docks with be Type GR2 “gasoline and oil resistant”
- Ground fault protection of 60ma at each panelboard and 30ma at each pedestal. This would ensure that a pedestal would trip prior to interrupting an entire dock or the entire service
- Marine pedestals will be specified with individual branch circuit breakers to protect each of the receptacles within the pedestal
- Coordination with the local Wiring Inspector

Our responsibility will also include meeting with the appropriate utility company representatives and incorporate their requirements into our design.

After all of the aforementioned issues are incorporated into a preliminary design, we would look forward to a review by all concerned parties to verify that the program needs have been met satisfactorily.

At this stage, final Contract documents, consisting of detailed plans and specifications, would be prepared and incorporated into the scope of work.

This office would provide shop-drawing review of all specified equipment and be available to the contractor for consultation of field concerns and to answer RFI’s.

This office would propose a fixed fee of \$9,500.00 for the above mentioned electrical engineering services + \$3,000.00 for Construction Administration services. Any additional mutually agreed upon services should be performed on and hourly basis at the following rates:

Engineer	\$135.00 <i>per/hour</i>
AutoCAD Operator	\$100.00 <i>per/hour</i>

This office would exclude from our design services the following;

- Sustainable Design
- Life Cycle Costing
- LEED Participation
- Fire Pump and Service
- PV Design
- Fire Alarm System
- Commissioning
- Rebate Forms
- Documents for alternative bids.
- Value engineering or redesign in the event of cost over-runs.
- Preparation of forms or documents for submission to the local utility company for energy rebate programs.
- Work involving permits.
- As Built documentation
- Cost Estimating
- Energy simulation modeling
- Design of alternative energy systems
- Arc-Flash/Coordination study

This office would estimate reimbursable expenses for this project being approximately \$1,500.00 as they relate to the project. Reimbursable expenses will include travel, lodging, meals, printing, plotting and will be invoiced at end of each month.

Our firm carries \$1,000,000.00 in liability insurance for errors and omissions.



If this proposal is acceptable to you in its present form please return one signed copy for our records. If you require any other standard form of agreement for services to be provided, please prepare the document and send it to us for review.

If there are any questions, please do not hesitate to contact this office at your convenience.

Very Truly Yours,
VINCENT A. DiIORIO, INC.

Vincent A. DiIorio, Jr.
President

Approved: _____ Date: _____
(Please sign and return One copy)