VTA CHURCH STREET REVIEW COMMITTEE
TOWN OF EDGARTOWN

MINUTES OF ZOOM MEETING HELD ON SEPTEMBER 8, 2020

Alan Strahler, the chair of the committee, opened the meeting at 12:04 PM.

All members of the committee were present on zoom, as follows:
Keith Chatinover
Angie Gompert (non-voting member)
Julia Livingston
Mark Snider
Alan Strahler
Bill Veno
Doris Ward

In addition, two members of the public attended the meeting on zoom, as follows:
Jonathan Chatinover (Keith Chatinover's father)
George Brennan (a reporter from the MV Times)

Alan noted for the record that Jane Chittick and Sara Piazza had resigned from the committee by emails sent on September 7. He reminded the committee that a quorum is now four members, so communications outside of meetings cannot be among more than three members.

Bill expressed his regret that Jane and Sara felt they were not being listened to. Alan said he felt the committee had benefitted from their contributions. Doris asked whether not being listened to was their reason for resigning. Alan said he thinks so, and he added that a lot of what they were saying is not within our charge from the board of selectmen. Mark said we've all tried to be open and honest brokers of information and opinions. Julia said we had tried our best to listen within the constraints of our charge and the meeting format. Keith noted that Jane and Sarah had used language that is inappropriate, unacceptable, shocking, and appalling.

Alan said the committee would carry on and eventually issue a report. Julia said that a first draft of the committee's report would be circulated to all committee members well in advance of our next meeting and that the committee might be able to complete its work at the next meeting. The committee unanimously agreed that the next meeting would be on zoom on September 29, 2020 from 11:00 PM to 12:30 PM.

The first order of business was public comment, and the only public comment received was 28 pages of material sent from Jane Chittick by email. This was discussed near the end of this meeting.

The next order of business was a motion to approve the minutes of the previous meeting. The motion was unanimously approved in a roll call vote.

The next order of business was a presentation by Angie Gompert of her answers to a set of questions submitted to her by Jane Chittick. Angie shared the email questions and answers on zoom and summarized them orally for the committee. Angie reported that, in the RFP process, only WAVE and Momentum Dynamics had presented proposals in response to the RFP for the inductive chargers, and Momentum Dynamics received a higher score than WAVE from each of the three reviewers. She said that the financial health of both WAVE and Momentum Dynamics was considered. She said the cost of the project was reduced when the VTA decided to go

down from 300 kW to 150kW per charger and when Momentum Dynamics came out with their "generation 2" induction chargers. Angie reiterated that the VTA cannot order any more electric buses to replace diesel buses that are at the end of their useful lives unless the Church Street inductive chargers are installed. She said the BYD electric buses now operated by the VTA are meeting their expected ranges. She said that all six Vineyard towns and the Martha's Vineyard Commission had approved the plan to transition to all electric buses back in 2017. She reiterated her explanation from our last meeting about why the VTA does not want hybrid (diesel and electric) buses. She said she has had no conversations with people in authority in Oak Bluffs since 2017, and she mentioned that the existing bus stops in Oak Bluffs are in the Oak Bluffs historic district. She said that the planned induction charging for the VTA was designed to work with no change to the number of buses in the VTA fleet (32) and within the existing VTA schedules and routes. She believes that putting the Edgartown induction chargers at the park and ride, instead of at Church Street, would add about 15 minutes and significant inconvenience for passengers trying to continue on into downtown Edgartown on these buses after they charge at the park and ride. If these buses do not continue on into downtown Edgartown, passengers would have to transfer into mini buses, and a significant number of additional mini buses would be needed for route 11. Angie pointed out that passengers don't like to transfer, and the existing VTA system has been designed to be easy and convenient to use. She said induction charging was designed to work with the existing routes, schedules, and number of buses.

Bill asked Angie about the planning of the changes to the visitor center. Angie said the VTA had requested the Edgartown board of selectmen to put together a stakeholder group. This was done in 2018. The group included a member of the Edgartown planning board, a member of the Historic District Commission, a member of the Edgartown beautification committee, a representative of the 19 Church Street property, Doris Ward (who lives at 26 Church Street), a landscape architect, James Hagerty (the town administrator), the superintendent of the highway department, the superintendents of the water and wastewater departments, and Paul Pimentel representing the energy committee. She said the stakeholder group met over four or five months. Doris said she felt that it was really a good effort and no stone had been left unturned.

The next order of business was a presentation by Bill Veno of a matrix he had prepared and which he shared on zoom. Bill said that his matrix was intended as a way of organizing his thoughts and bringing up issues for discussion and was not intended to be a final document. His matrix includes the speculation that there would be at least a one year delay to identify, engineer, and acquire an alternative site, and notes that this may require changes to the bus routes or transitioning buses among routes. Angie thought a year was a good estimate. She mentioned that Eversource is slow to do their engineering. She said the Eversource process for a different site would probably take at least six months. She also mentioned that, of course, construction can only take place in the off season. She said the existing grant is a 2018 grant which has an outside date of September 2021.

In a discussion of bus sizes, Angie reiterated that the buses are not wider or longer because they are electric or because of the induction chargers. She said the VTA needs a mix of 30', 35' and 40' buses to respond to seasonal and other variations in passenger load. She said these sizes are the most efficient for the Vineyard's needs. She said there is no plan to change the numbers or sizes of buses stopping at Church Street, whether there are or are not induction chargers on Church Street. Mark and Julia pointed out that the difference will be whether all the buses are electric or whether, in addition, there will be diesel buses taking over for the electric buses that have "spent" batteries.

In a discussion of the look of the induction chargers, themselves, it was confirmed that the metal plates in the street will be dark colored and will be flush with the street and blend in with the surface of the street.

In a discussion of the proposed tree removal, Angie reiterated that only one tree needs to be removed because of the induction chargers. She also said the Norway Maple very near the northwest corner of the visitor center has caused problems for the roof of the building.

In a discussion of the two electrical boxes near the sidewalk, Angie said that the one planned for the southwest corner of the property can't be located anywhere else because of a drainage basin under the street that means the third charger needs to be under the fourth bus parking spot, back near the courthouse driveway. Angie said the noise from the two electrical boxes is intermittent and similar to that of an air conditioner.

Various committee members expressed the feeling that improvements to the drainage, shade/shelter, seating, and other aspects of the visitor center plaza are definitely needed. Mark said that wrapping one or both of the electrical boxes with information for tourists is an opportunity to have improved signage and communications, which would be a real positive for the town. Doris agreed and said the new signage should be beautiful and classic. She mentioned the new police station signs. Julia mentioned the informational signs at the Oak Bluffs end of State Beach. Mark said that, overall, this project would be an asset to the town. He said Church Street would be attractive and quiet and dramatically improved.

Mark and Doris both said they thought the committee should prepare a simple list of points in addition to a more complete report.

Alan asked whether committee members would like to have a site visit. It was agreed that we would meet at the visitor center at 9:00 AM on September 9. Alan reminded the committee that we would not be able to engage in discussion during the site visit, but could ask questions of Angie and Angie could provide answers. Keith said he would not be able to attend.

Alan raised the question of what we should do about the many pages of material Jane had sent by email for our consideration. Bill said the emailed material from Jane should be treated like any other material received from a member of the public. Alan said the notice for the meeting had specified that written comments from the public should not exceed 3 pages. Keith suggested that Alan send an email to Jane saying we will include her material with these minutes if she condenses it down to 3 pages. The committee did not discuss the substance of the material provided by Jane.

Julia said she would begin working on a draft report immediately and would get it out to all members of the committee in time so that they could respond with comments before, or at the time of, our next meeting on September 29. Alan said all comments given ahead of the next meeting should be given only to Julia.

At 1:51 PM, there was a motion to adjourn, a second, and a unanimous roll call vote.

List of materials presented:

Email questions and answers presented to the committee by Angie Gompert
Matrix presented to the committee by Bill Veno

Email questions and answers presented to the committee by Angie Gompert

Including an attachment to that email:

"VTA #2019-03 RFP Wireless In-Route Charging.pdf"

From: **Angie Gompert** angie@vineyardtransit.com
Subject: RE: Qs re last week's presentation
Date: September 7, 2020 at 1:14 PM
To: jane Chittick jane.chittick@icloud.com
Cc: Mark Snider msnider@stanmar-inc.com, Keith Chatinover kchatinover@gmail.com, Strahler, Alan alan@bu.edu

AG

Hi Jane,

I know how important the preservation of Church Street is to you and Sara. The VTA is trying to balance many competing interests in this dialogue- Church Street aesthetics; pollution free buses; safety; efficient service; appealing passenger routings and the needs of varying interests in the Town of Edgartown. This is not easy to do and I am trying my hardest to please many different constituents.

My understanding of the Committees mandate is strictly to determine the use of inductive chargers - so some of the questions you raise below regarding relocating to Park and Ride or operating smaller buses are really not related to the inductive charger issue. However, I've tried to give you answers to the concerns and suggestions you have raised to provide context. Unfortunately, the unintended result of using Park and Ride or operating smaller buses, as I have outlined below, has negative impacts on the VTA operation, increases congestion and goes far beyond the well intentioned suggestion to consider these changes.

Best regards,
Angie Gompert, Administrator
Martha's Vineyard Transit Authority
11 A Street
Edgartown, MA 02539
508-693-9440 ext 110

From: jane Chittick [mailto:jane.chittick@icloud.com]
Sent: Monday, August 31, 2020 1:21 PM
To: Angie Gompert
Cc: Alan Strahler; Keith Chatinover; Mark Snider
Subject: Qs re last week's presentation
Good Morning, Angie
At our meeting, you said that "3 people" read the proposals submitted to the RFP and that Momentum was their first choice, and you concurred.

1. What did the RFP specifically ask for? See attached
2. Was the Church Street site specifically mentioned? Yes. See attached Any other sites? See attached
3. What was the date the RFP was published and where was it advertised?
   See attached – local paper and State Goods & Services Bulletin
4. What companies responded? Wave & Momentum Dynamics
5. Did these companies visit the Vineyard prior to submitting their proposals? Yes
6. Who were the "3 people" who reviewed these proposals? [Names, position, expertise, etc.] VTA former general manager two consultants from VEIC
7. What were the reasons they gave to select Momentum over the other companies? See attached for the Criteria for Selection in the attached RFP. Momentum received a higher score from all three reviewers
8. Was financial health of the companies specifically considered? Yes, as required by Federal and State regulations
9. Did you talk in person with anyone who had done or was doing business with Momentum regarding being a good choice for the VTA? (recommendations) Yes
10. What was the date and amount of the signed contract? Original PO signed 9/21/18 for $1,111,000. Revised PO was signed 7/15/10 for $746,000 (12 vehicle assembly's, chargers & equipment) – does not include installation cost
11. Exactly what will Momentum do if the project advances? What won't they do (who will do these tasks)? Momentum will supply equipment and install their equipment. VTA would be in charge and have oversight of the remaining construction & civil work, except Eversource

12. Last week you made a strange statement to the effect that without induction chargers, the VTA would not be able to get new electric buses and would have to revert to diesel buses. Besides this statement being extravagantly ludicrous, your position is to explain to others the various options that exist. First, induction chargers have only been "out" for about a year now. That would mean that 20 years ago when you started at VTA that you never could have envisioned electric buses here at all (induction hadn't been "invented" then; therefore, according you your pronouncement last week, the island would always be using diesel). Since wanting to go "all electric", did you tell the island that bus batteries have not lived up to the manufacturer's public boasts but that these companies are developing stronger batteries with more range? That induction chargers are seen by most experts as only temporary fixes? Why did I have to tell everyone there real story about who's using them and who isn't, when you're the one paid to do the job, and I'm just a retired senior citizen (but one who at least knows how to think.)? Why haven't you told the committee and the public about federally funded low-emission-hybrid-electric buses that cities are buying to be used *now,* while waiting for the electric batteries that are improving at a very rapid rapid pace? Instead you pull out the fear factor: "Induction or Diesel, that's your choice.!" It's totally irresponsible of you.
    Last week I said unless we put induction chargers in, we won't be able to buy any more electric buses-because the range is not adequate.

    Induction chargers are working, even though they are newer technology in the US. I expect they will work fine for us, just like they do in Wenatchee, WA-as we heard two weeks ago.
    I also stated last week that the VTA is meeting the expected range (see below). I can't speak to other agencies not meeting the expected range.

Range In Miles

	K7 (30-ft)	K9S (35-ft)
Advertised Total range	150	210
Average Actual Range in VTA Service 2020	154; sit in the	207
Average Practical Range in VTA Service 2020 (80%)	123	166

The VTA traditionally has operated a diesel fleet. We elected to go all electric, which was supported by all 6 Towns Boards of Selectmen and the MV Commission in 2017. The VTA is not interested in pursuing a hybrid technology. We want all battery electric buses.

In FY 19 & 20, FTA did allow hybrid buses to be purchased using low no emissions funding, I was wrong last week that they weren't allow, that was a change I was not aware of but it's irrelevant, as the VTA will not be pursing hybrid technology. FTA makes the decision annually, as to which technologies will be supported by their annual grant programs. Here's the Project Executive Summary from our FY 20 FTA approved grant application.

The Massachusetts Department of Transportation (MassDOT) and the Martha's Vineyard Transit Authority (VTA) request $1,050,000 to help purchase three electric transit buses outfitted with inductive charging pads. Funding requested is for the incremental cost of purchasing the electric buses. Matching funds will be provided by MassDOT through the Regional Transit Authority Capital Asset Program (RTA-CAP) as well as other federal and state grants.

Also you mentioned the VTA's attorney: who is this? What was the topic? VTA has different attorney's for different things.

Where exactly in Oak Bluffs have you discussed being a potential site for induction chargers?
I have not discussed anything with the Town of Oak Bluffs yet. However, the VTA bus stops are located next to Ocean Park and across from Ocean Park on Sea View Ave, in their historic district.

1.

Last week I asked why #1 (Edgartown-VH) couldn't do a circular route (e.g., Edg-VH-OB-Edg) and why #13 also couldn't do a circular route in the opposite direction (Edg-OB-VH-Edg). In other words, OB could become the VTA "hub" [and not our little historic 17th c. Church Street].

Unfortunately Route 13 (OB to Edg) operates many more buses than Route 1 (VH to Edg) during the summer and in the winter there is more traffic on Route 1 and less on Route 13 so the circular route is actually very inefficient, running
more buses on certain routes when they are unneeded. Route 8 only runs from Edgartown to South Beach and can't be looped into OB. So although I understand the intent of your suggestion, it doesn't work for our unique type of operation.
OR:

2.

Why can't the buses coming from OB to Edgartown take the (2-lane) cut through in front of the Square Rigger to the Edgartown Park & Ride lot; charge the bus; and then continue to downtown or elsewhere? In other words, charging (nozzle or induction) could take

place here servicing both #1 and #13 routes. [buses cross Pease's Point Way/Main Street and stop traffic here, just as they would in front of the Square Rigger.].

Rerouting the buses into the Park and Ride (especially through the traffic in that area) and stopping long enough to charge each vehicle at the Park and Ride would add 10-15 minutes to each one way trip in or out of Edgartown. This makes no sense to us. The buses are already sitting in Edgartown between runs so no one is inconvenienced. To add this time detracts from the appeal to ride the bus and would require additional buses on the routes due to the extended running times. Keeping passengers on a bus that has gone out of its way to fuel is not appealing to the passengers. We designed the induction charging to work within the existing VTA schedules.

a.

The VTA owns the lot, it's just ugly asphalt, and there'd be no environmental damage and no historic damage, and 'Edgartown' would still be the VTA "hub". See above response.

b.

The smaller #11 bus could also bring riders to Church Street, thus alleviating these monster buses every 15 minutes that everyone

hates and are virtually empty.

Transferring passengers from a 40' & 35' bus (11 of them an hour) to multiple 23' minibuses is simply not practical nor does it make any sense. If we have 11 large buses now coming into Edgartown each hour we would need at least 16 mini buses to transfer patrons at the same capacity. In addition, patrons do not want to transfer buses, creating more delays and adding to the Triangle traffic woes. The VTA's route system structure works extremely well and is very efficient as it is presently designed.

c.

As to your concerns about riders having to debark in the rain or snow: build a nice little shelter. That's all. Just like in Boston, DC or anywhere.

In the winter passengers can wait inside the heated Visitor's Center, though it is small and does not provide adequate sight lines to buses arriving. In the summer the present overhang is simply too small for the number of people waiting for buses, especially when it rains. The proposed changes provide improved protection for all our riders, regardless of the weather.

d.

It's what transit is like in any other city - you change buses or trains when going to certain stops. I have lived in the

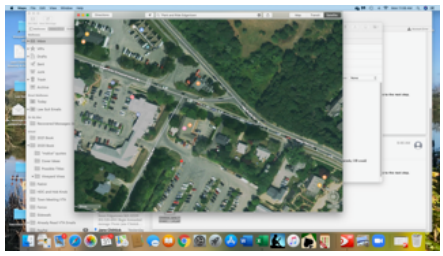
downtowns of Paris, Boston, Washington [**IN THE CITY ITSELF**](not in the suburbs)] and took public transport. You have to walk to the nearest stop, wait at that stop for the transit; get off to change to another bus or train; walk to that train

or bus; get on that vehicle and then get off at your end stop. And, you you might even have to change vehicles at multiple interim stops. Public transit is not Uber.

e.

If the July and August tourists want the comfort of a tour bus, let them buy a ticket and ride around the island without getting off. That at least creates employment for local tour bus drivers and operators. And we cease being what we are: a tour bus operating

at full summer schedule all year long. The VTA buses are not tour buses, there are several private tour providers on the island, using various sized vehicles.



With either

OB as the “hub" or Edgartown Park & Ride as the “hub”, you’d have no fight on your hands. The Edgartown voters would be thrilled and this unpleasant saga ended. I would personally advocate for either one of these solutions at Town Meeting. [I realize advocating

for nationally recognized transit experts to study this entire operation won’t happen as that would mean being impartially judged by transit talent who might expose cracks.]. Therefore, I suggest either one of these two “hubs” (OB and/or Edgartown Park &

Ride) as instant political solutions. And life could go on….electric vehicles, hybrids (vs diesel), rational routes and hubs, etc.

Alan: I would like to suggest Church Street vs. OB or Park & Ride as a topic for our next meeting. In the interim, Angie, please respond to the questions about Momentum, etc.

Thank you

Jane

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Best Regards,
Angie

REQUEST FOR PROPOSALS
FOR
Wireless In-Route Vehicle Charging System
VTA Project #2019-03

PROCUREMENT SCHEDULE

Advertise Request for Proposals: (RFP's)	8/14/2018
Deadline for questions by 10:00 AM	8/28/2018
RFP's due in VTA Office by 12 noon	9/6/2018
Award and Notice to Proceed	9/14/2018

A Pre-Proposal conference will be held 12:30 pm on Tuesday, August 21, 2018 at the site located at 29 Church St, Edgartown, MA to discuss elements of the Projects and answer questions. All proposers are strongly encouraged to attend the Pre-Proposal Conference.

I. Summary:

The Martha's Vineyard Transit Authority (VTA) is seeking proposals for a system of high-power wireless in-route charging for its growing fleet of all-electric buses. The VTA anticipates a need for ten buses to be equipped to charge from three in-route charging stations in 2019. The in-route charging system will expand as the VTA continues to add electric buses and charging stations over the next several years.
The VTA seeks to minimize visual impact of charging systems while maximizing bus range and minimizing schedule changes. In parallel with this project, the VTA expects to install battery energy storage systems at each in-route charging location to minimize negative impact on the electric grid.

II. Background

Located seven miles off the south coast of Cape Cod, Massachusetts, the Island of Martha's Vineyard has been one of the fastest growing areas in the northeast for the past three decades. Martha's Vineyard is nationally known as a prime vacation destination visited by thousands of vacationers annually and is home to tens of thousands of year-round and seasonal residents.

Preserving the character of Martha's Vineyard has long been a common regional goal. In the 1980's and 1990's the rapid increase of population, tourism and seasonal use generated significant traffic levels that threatened to overwhelm the Island's modest road infrastructure. The general fear was that the impact of the Island's popularity would diminish the very qualities that made it an attractive place to be in the first place.

Recognizing that the increasing number of automobiles threatened to destroy the local quality of life, the Island towns supported a substantial expansion of the Martha's Vineyard Transit Authority (VTA) fixed-route services. Committing to transit service became the most prominent traffic mitigation measure for this rural region. The VTA underwent significant phases of growth, including Island-wide and then year-round. Through the years and up to the present, incremental expansion of individual services continues due to ridership demand and as resources allow.

While the VTA fleet vehicles meet the latest environmental standards based on each unit's build year, the diesel vehicles currently in the fleet do not present a convincing image to the general public. It is hard to convince observers that the white water vapor clouds billowing out of the bus exhaust systems, seen during the diesel particulate filter regen process, are not pollution. Additionally, vehicle noise is a consideration in rural/suburban areas. The VTA frequently contends with engine noise complaints from residents of downtown areas with mixed residential and business use, where several of the VTA's bus hubs are located.

In response to these concerns, the VTA contracted for An Alternative Fuels Assessment and Feasibility Study in the fall of 2015. The purpose was to research the current alternative fuel transit market. The contract was awarded to Vermont Energy Investment Corporation (VEIC). In the spring of 2016, the VTA received the final report from VEIC. A full copy of the report can be found at: http://www.vineyardtransit.com/Pages/VTA_BBoard/I056A90F2.

The initial recommendation was to conduct a pilot program on the Vineyard to test the viability of electric vehicles. The belief was that the electric buses may be best suited to short park-and-ride type routes. However, the project scope was expanded to a full fleet replacement after visits to sites in California with electric bus fleets already in use. At the Antelope Valley Transit Authority, Stanford University and the Facebook headquarters, the VTA learned that improved electric vehicle technology could be used successfully on longer and more heavily travelled fixed routes. The keys to this are the in-route charging stations. The electric bus project on the Vineyard will entail significant infrastructure improvements and minor operational changes.

The VTA's objective is to deploy an electric bus fleet to serve the Island's existing fixed route transit system with the long term goal of replacing the van/minibus fleet with electric vehicles as well. Deploying an electric bus fleet will better fulfill the VTA's overarching goal of improving air quality and minimizing noise pollution. The bus fleet will be supported by sub-systems that provide solar power collection, electrical grid connections and energy storage. The electric vehicle charging infrastructure will be used to charge the zero-emission VTA fleet vehicles at locations along the bus routes and the VTA's Maintenance and Operations Center. Construction of infrastructure at the VTA's base is underway, as well as a contract awarded for PV canopy installation.

III. SCOPE OF WORK

The VTA is seeking proposals to provide wireless in-route charging systems for the VTA's BYD K9s and K7 electric buses. Several locations will require charging stations. It is important to the VTA that the proposer is mindful that these projects are located on Martha's Vineyard, which is accessible by ferry, barge, or air only, and where the busy summer tourist season makes construction work impossible. Aesthetic considerations are paramount in historic Vineyard towns, requiring careful consideration of sight lines and locations of equipment. Brief descriptions of the planed in-route charging locations are below:

- **Church Street, Edgartown** – Three in-route charging stations will be required curbside in the road. The transit center will be undergoing a redesign to better

accommodate charging electronics, and improve flow and access. A new electrical service will be required, and the VTA plans to install a 250kW lithium ion energy storage system onsite.

- **West Tisbury** – final location(s) to be determined – one or two in-route charging stations will be required. The VTA anticipates incorporating an energy storage system with in-route charging at this site.

- **Subsequent locations –** Individual in-route charging stations will be installed at one or more locations in 2021 and/or future years.

- **Vehicle Hardware**

  In addition to fixed hardware, the VTA's existing electric buses and additional future buses will need to be equipped with any equipment necessary for in-route charging. Two K7M and four K9S buses will need to be retrofitted at the VTA's site, where the VTA will provide a work bay with a lift. Four additional electric buses will be delivered in May 2019. These and all subsequent electric buses will need to be equipped for in-route charging prior to delivery.

The tasks of this scope are the following:

A. Consultation, Advice and Coordination

The successful supplier will, through consultation, advice and coordination, assist the VTA and its contractors to develop a project that meets the specific needs of the VTA and the character of the Vineyard to create a functional, yet aesthetically pleasing in-route charging system for VTA buses.

There are other project contractors needed to complete these projects for the VTA. Specifically, but not limited to:

- Landscape and Hardscape Contractors
- Electrical Engineer
- Landscape Architect
- Utility company (Eversource)
- Energy Storage System Supplier
- Electrical Contractor
- Bus Manufacturer (BYD Motors)
- Microgrid Control Software Provider

The intention is to incorporate the various pieces of curbside equipment that are necessary for the buses to charge wirelessly in a manner that is safe, tasteful, durable and perhaps educational.

To complete installation of on-vehicle equipment in the most economical manor, the successful vendor will coordinate with the VTA's bus manufacturer (BYD Motors.) Six buses will require retrofits at the VTA's maintenance garage, where a BYD mechanic will be available. Four buses will require addition of wireless charging equipment prior to delivery in May 2019, and subsequent new buses should be equipped prior to delivery, without adding substantial delay to delivery schedules. Drawings/plans of the physical installation and wiring are required.

The successful vendor will also provide consultation, advice and coordination in accordance with, but not limited to, the following requirements:

a. The successful vendor shall keep VTA and its contractors informed as to the scheduling and progress of the various aspects of the project work;

b. The successful vendor shall advise and assist VTA in the preparation of specific instructions for the performance of work hereunder;

c. The successful vendor shall attend or be satisfactorily represented at meetings and conferences held in conjunction with the work described herein as deemed necessary by VTA.

B: Design and Installation Services: On-Vehicle Systems:

Design and installation services for on-vehicle systems will include as minimum requirements, the following:

1: Coordinate with bus manufacturer (BYD Motors) to create design drawings for onboard systems for each bus model.

2: Provide sufficient on-site technical advice and supervision at the VTA's Maintenance and Operations Center to ensure that field-installed on-vehicle equipment is installed correctly by the VTA's and/or BYD's mechanics.

3: Provide all necessary assistance to bus manufacturer to ensure correct and timely installation of on-vehicle equipment on all vehicles to be delivered in 2019 and beyond.

4: Provide inspection and commissioning services to ensure that each on-vehicle system is operating safely and effectively as designed.

Additional Services
The VTA asks that any proposal contain an option to field-install the first six on-vehicle systems, and install all subsequent systems at the BYD factory.

In addition to the above, the proposer may elect to offer alternate installation plans. For example: the proposer may offer to complete some or all installations with their own personnel, or at another location of their choosing. For each alternative installation plan, proposer should explain anticipated advantages and disadvantages, including but not limited to quality, cost, logistical, and timeline considerations.

D. Construction and Installation Services: Stationary Systems

Construction and Installation Services for stationary systems will include, as minimum requirements, the following:

1. Participate in the pre-construction meeting as directed by VTA with successful bidder(s).

2. Check and approve shop and working drawings prepared by contractors.

3. Observe, review and/or approve construction activities when directed by VTA

4. Advise and assist electrical and hardscape contractors as necessary to ensure correct construction and installation.

In addition to the above, Proposers may elect to submit alternative pricing which includes installation of stationary systems. If proposers are including installation as an option or by default, proposers should describe anticipated timelines, subcontractors, plans for coordination with the VTA's other contractors, and itemize pricing.

E. Consultation, Advice and Coordination

The Successful vendor will, through consultation, advice and coordination, assist VTA in meeting all requirements of any public agency or utility in connection with seeking approval for any and all elements of the project.

The Successful vendor will also provide consultation, advice and coordination in accordance with, but not limited to, the following requirements:

1: The Successful vendor shall keep VTA and its contractors informed as to the scheduling and progress of the various aspects of the project work;

2: The Successful vendor shall provide advice to enable VTA (in consultation with its contractors) to establish, and revise from time to time, a time schedule to be followed in the conduct of the work;

3: The Successful vendor shall advise and assist VTA (in consultation with its contractors) in the preparation of specific instructions for the performance of work hereunder;

4: The Successful vendor shall attend or be satisfactorily represented at meetings and conferences held in conjunction with the work described herein as deemed necessary by VTA.

F: Commissioning, Training, and Ongoing Support

Commissioning

Upon delivery and completion of electrical installation of stationary and on-vehicle systems, the successful vendor shall be responsible for energizing the in-route charging system and completing a full range of capacity, performance, and safety testing.

Commissioning testing shall include Operational Acceptance Testing to verify: electrical, mechanical components of the system are ready for start-up, controls are in place and test operation, electrical protection and relays are coordinated and operational, all safety systems are installed and operating, all communication systems are operating, and emergency procedures are in place.

Training

The successful vendor will provide a comprehensive safety and operation manual. Successful vendor will also provide a comprehensive on-site training in safety and operation for VTA's staff and contractors once the in-route charging system has been commissioned.

AT ITS OWN DISCRETION, VTA MAY ELECT TO COMPLETE ONLY A PORTION OF THE TASKS/WORK ELEMENTS LISTED ABOVE.

IV. Project Timeline

Date	Milestone
9/14/18	Award and Notice To Proceed
10/1/18	Site Plans complete
12/1/18	Site work complete
3/1/19	On-Vehicle hardware installed on six existing vehicles
4/15/19	Installation of at least three charging stations complete
5/1/19	At least two charging station operational, six buses operational
5/1/19	Four additional buses ready for delivery to vineyard with on-vehicle hardware installed.
5/15/19	Last charging stations operational. Installation work ceases for summer season.
Below estimated timeline, if additional funding is secured	
~~September 2019	Construction begins (2nd Location)
~December 2019	Site work complete (2nd Location)
~April 2020	Two Charging Stations operational (2nd Location)
~May 2020	Next round of new buses equipped with on-vehicle hardware prior to delivery.
Beyond	One or two additional sites to be added. Several new buses to be added per year. Entire fleet of 32 buses will be converted.

V. System Requirements

The VTA is seeking proposals for a heavy-duty in-route charging system that meets the minimum characteristics in the tables below.

Operating Characteristics	
Operating Temperature	-30C to 50C
Equipment Storage Temperature	-30C to 60C
AC Input	480V 3 Phase
Total Harmonic Distortion (THD)	Meets IEEE 519/1547 standard
Hazardous Radiation	Independent confirmation of ICNRP 2010
UL Certification	System must have or show demonstrated ability to obtain UL certification.
FCC	Installed system must comply with FCC part 18
Flexibility	Support for various vehicles at various charging rates, while maintaining efficiency.
Peak Efficiency	Peak efficiency as measured in (kW DC to battery) / (kW AC in) >=90%. Auxiliary and cooling loads should be included in overall efficiency.
Average Efficiency	Average efficiency over typically varying charging rates and durations as measured in (kW DC to battery) / (kW AC in) >=85%. Auxiliary and cooling loads should be included in overall efficiency.

VI: Additional Information

In addition to the operating characteristics above, please provide the following information:

Overall System Design

- Description of system operation, including redundancies, safety features, and fail-safes.
- Dimensional drawings of stationary equipment
- Description of overall charging process
    - Detailed description of alignment and charge engagement process, with timeline
- Preventative Maintenance Requirements
- Hardware lifetimes:
    - Anticipated lifetime of stationary systems
    - Anticipated lifetime of on-vehicle systems
        - If it may be the case that components of an onboard system outlast the vehicle, describe the process and costs of transferring a system to a new vehicle.
- Description of cooling system and cooling system controls
- Description of system operational resilience in event of flood, heavy snow, heavy ice, or high winds.
- Proposed methods for minimizing visual impact of system components, with examples

System Specifications

- Maximum and proposed stationary system kW capacity (measured at vehicle battery)
- Minimum kW output (as a percent of maximum)
- Maximum AC input KVA
- Minimum and typical power factor
- Maximum continuous charge time at rated power and maximum rated temperature.
- Maximum Sustained Charging Rate in DC kW to battery for vehicles:
    - 2018 30’ BYD K7M with 197 kWh battery.
    - 2018 35’ BYD K9S with 270 kWh battery.
- Measured system efficiency at multiple power levels: 100%, 75%, 50% and 25%, for example
- Detailed explanation of alignment tolerances.
    - Maximum misalignment tolerance.
    - Efficiency and capacity for varying degrees of misalignment, up to maximum misalignment tolerance.
- Maximum and typical noise levels in dBA at 10ft for each component cluster

Technology & Successful vendor Credentials

- Total kWh delivered by this technology to vehicle batteries in revenue service
- Total vehicles equipped in revenue service at present
- Total stationary systems in operation at present, with capacities

- References for up to three agencies currently employing this technology.
- Project descriptions, including project timelines, for recent example projects
- Describe past successful engagement with electric utilities to implement high-power in-route charging projects

Warranty & Service

- Standard warranty terms
- Extended warranty options up to 12 years
- Availability of technical support by phone
- Expected response time of qualified technician to reach the VTA on Martha's Vineyard in the event of an emergency service call
- Format and scope of all formal trainings to be provided

VI. ADMINISTRATIVE REQUIREMENTS

Consultant proposals, in response to this request, must be submitted to:

Angie Grant, Administrator
11 A Street
Edgartown, MA 02539
Thursday September 6, 2018 at 12 noon

The proposals will be limited to a maximum of fifteen one-sided 8 ½ " x 11" pages, excluding certifications and required forms. One original, one hard copy and two (2) electronic copies in a sealed envelope clearly marked Proposal for Wireless In-Route Vehicle Charging System VTA Project #2019-03. **Requests for changes or clarification of the specifications must be received by VTA in writing to angie@vineyardtransit.com no later than August 28, 2018 at 10 am .**

Proposals should include, but not be limited to, the following information:

1. Three (3) references should be included. The references shall be from past wireless in-route charging projects and shall include names and telephone numbers of the references.

2. The names and qualifications of the principal staff members who will be assigned to the project, particularly the project manager and others who will be in charge of the work day to day and the approximate percentage of total man hours to be worked by each task.

3. The address, telephone, e-mail and fax numbers of the office in which the work will be performed.

4. The name, address and qualifications of any proposed subcontractors and identification of the tasks to be performed by them, broken down by hours for each task.

5. A proposed time schedule for the work as defined in this proposal by task and a short narrative of ideas, approaches to the project, as well as project team management concepts on the proposed project.

6. Any recommendations for changes or additions to the Scope of Work consistent with the objectives of the project.

VI. CRITERIA FOR SELECTION

VTA may refer all acceptable proposals to its Legal Counsel for review as to compliance with requirements of this solicitation document and upon the results of said review VTA will evaluate all acceptable proposals in accordance with the following Criteria:

A. Technical Specifications of System
B. Quantity, Duration, and Reliability of Installed Systems
C. Quality and Responsiveness of Proposal
D. Ability of System to fit Martha's Vineyard Aesthetic
E. Price

The Criteria for Selection are listed in order of importance. Each proposal will be ranked in accordance by the VTA Evaluation Committee. VTA may elect to conduct interviews/presentations with proposers.

Unsuccessful proposers will be notified at the earliest practical time that their offer is no longer being considered for award.

If deemed in the best interests of VTA and if satisfactory to VTA, the selected proposer shall be issued a Notice to Proceed. VTA shall then enter into a contract as expeditiously as possible.

VTA may, in its discretion, have discussions with individual proposers for the purposes of clarifying responses to the solicitation requirements. **VTA reserves the right to waive any informality to accept or reject any and all proposals. In addition, VTA reserves the right to reject or rescind any work element within said proposal.**

VII. REQUIRED COMPLIANCE CERTIFICATIONS, FORMS AND REGULATIONS

Attached to this proposal are the required compliance certifications, forms and regulations. All certifications and required forms must be submitted with each proposal. The certifications and required forms are listed below:

Protest Procedures
Miscellaneous
Buy America Requirements

Buy America Certification
Cargo Preference Requirements
Fly America Certificate
Certification Regarding Debarment, Suspension
Statement of Bidder's/Proposer's Qualifications
Implementation of Clean Water Act
Addendum Page
Completeness of Bid/Proposal
Certification Regarding Lobbying
Certification of Primary Participant
Certificate of Eligibility
Affidavit Non-Collusion Bidding Certification
Implementation of Clean Air Act
Requirement of Revenue Enforcement and Protection Program, Commonwealth of Massachusetts
Equal Employment Opportunity
Special Requirement and Conditions
DBE Provisions
Schedule of Participation of DBE's
DBE Certification Affidavit
DBE Letter of Intent
DBE Unavailable Certification
Contractors' Certification Childcare Compliance/Chapter 521 Implementation
Childcare Certification

VIII. PROTEST PROCEDURES

A. Protests will only be accepted by VTA from prospective bidders or proposers whose direct economic interest would be affected by the award of the contract or refusal to award a contract. VTA will consider all such protests, whether submitted before or after the award of the contract. All protests must be in writing and conform to the following requirements:

1. Be concise and legally arranged.
2. Provide name, address and telephone number of protestor.
3. Identification of the solicitation or contract number.
4. Provide a clear and detailed statement of the legal and factual grounds of the protest including copies of all relevant documents.
5. A statement as to what relief is requested.

B. A protest before the Bid/RFP opening addressing the adequacy of the Invitation to Bid, RFPs, including the pre-award procedure, the Instruction to Bidders, general terms and conditions, specifications and scope of work

must be filed with VTA not less than seven (7) full working days before bid opening. Thereafter, all issues and appeals are deemed waived by all interested parties.

Upon receipt of the written protest VTA will determine if the bid opening should be postponed. If the bid opening is postponed, VTA will immediately contact prime contractors and subcontractors who have been furnished a copy of the specifications that a protest has been filed and the bid opening is postponed until a final decision is issued. Any appropriate addenda will be issued regarding a rescheduling of the bid opening. Any protest may be withdrawn at any time before VTA has issued its decision.

C. A protest of a decision of VTA to award a contract to a prime contractor or a subcontractor must be received by VTA within ten (10) full working days of its decision. This protest shall conform to the requirements of A above. Thereafter, such issues are deemed waived by all interested parties.

When a written protest against making of an award is received the award shall not be made until five (5) day after the matter is resolved. VTA may, however, proceed to make an award if it determined that:

1. The items to be produced are urgently requested or;
2. Delivery or performance will be unduly delayed by failure to make the award promptly; or
3. Failure to make a prompt award may otherwise cause undue harm to VTA, the Commonwealth of Massachusetts, or the Federal Government.

Complete Protest Procedures are contained in the Required Compliance Certifications.

Matrix presented to the committee
by Bill Veno

Induction Charging at Church Street

Sept. 4, 2020

Note: This matrix outlines the issues involved with the proposed VTA induction chargers at Church Street. For each issue, impacts are identified for if the chargers are located at Church Street (second column) as well as if the chargers are located somewhere else in Edgartown or the Island (third column). The intent is for everyone to help populate and correct the matrix items. - b veno

Issue	Impact to Church Street		Comment
	If Sited at Church Street	If Sited Elsewhere	
Induction Technology			
Soundness of Technology		No difference	
Implementation of Technology		Delay to identify, engineer, and acquire rights to use alternative site. May require changes to bus route system or transitioning of buses among routes.	*Speculate at least one year delay for an alternative location?*
Expense of Technology		Additional expense due to delays; unknown risk of losing complete grant funding of project in future or if other sources will become available.	
Size of VTA Buses		No difference	
Number of VTA Buses in Fleet		Possible increase to swap out 'spent' buses that don't leave Edgartown.	
Roadway			
Street Widening	Widen street across from Visitor Center by 2' for a length of approximately 55' to better accommodate bus at second stop to pull around bus at first stop. Angled granite pavers will tie into existing grade.	Possibly no difference (see comment).	Needed for buses to better navigate constraints of parking; exacerbated by longer and wider buses, whether or not electric powered. If charging project does not pay for widening, will it still be pursued?
Street Surface	Three rectangular arrays approximately 5'2" x 2'9" each appearing as two squares, side-by-side, flush mounted at curbside bus parking spaces. Each array surrounded by 2' of binder course asphalt. New asphalt of approximately 2/3 of the street width for a distance of about 150'.	No chargers installed; no repaving; no rerouting of town utilities.	Is there a benefit for town to relocate utilities (e.g. opportunity to upgrade nearly 100 year old water lines)?
Non-Roadway Infrastructure			
Removal of Power Poles and Undergrounding of Lines	3 utility poles removed from Church St sidewalk and overhead wires placed underground; pole transformers relocated to rear of town parking lot with battery.	Existing poles, power lines, and overhead lighting remain.	2 of the existing poles are periodically struck by parking buses; pole locations obstruct pedestrian movement along narrow sidewalk.
Extend Pedestrian-scale Street Lanterns Along All of Church Street	Replace 2 overhead streetlights with 8 decorative street lanterns and one light mounted on shelter structure. All lights to be located beyond the sidewalk except two lanterns sited near the abutting property line rather than the curb line.	No street lanterns installed. Overhead streetlights remain.	
Street Trees	Remove 3 compromised Norway Maple trees and replace with 3 trees species of more urban suitability.		
	-Plaza: 1 at southern end of to be replaced. 1 at edge of parking lot not to be replaced.	Tree at parking lot may still come down.	
	-West side of Church St: 1 large Norway Maple replaced with 2 trees of another species on the west side of the concrete wall.	Heavily damaged Maple may still come down, especially if the street widening occurs.	
Utility Cabinets	Install 2 cabinets in plaza within 10 feet of sidewalk.	No cabinets installed.	Cabinets can be 'wrapped' with a film with graphics and text, or with

	North: 89"l x 36"w x 71"h South: 66"l x 36"w x 71"h Sound energy specified for cooling system is 66 dBA from 1.5 meters.		removable wood. Design requires approval of the Historic District Commission. Comparable sounds: 60 dBA for ordinary conversation; 70 aBA for vacuum cleaner from 10 feet.
Battery	Located at rear of adjacent parking lot with relocated Eversource transformers. Screened with arborvitae in large planters on wheels	No battery installed.	
Visitor Center Plaza			
Visitor Center Plaza Improvements	Drainage, shade/shelter, seating, lighting, power outlets, circulation definition	No changes to existing infrastructure.	Town Administrator states there have been no plans to upgrade the Visitor Center plaza independent of the VTA project.