



Acton-Boxborough Regional
School Committee Meeting

April 26, 2018

7:00 p.m.

at the R.J. Grey Junior High Library

ACTON-BOXBOROUGH REGIONAL SCHOOL COMMITTEE (ABRSC) MEETING

Library
R.J. Grey Junior High School

April 26, 2018
7:00 p.m.

AGENDA

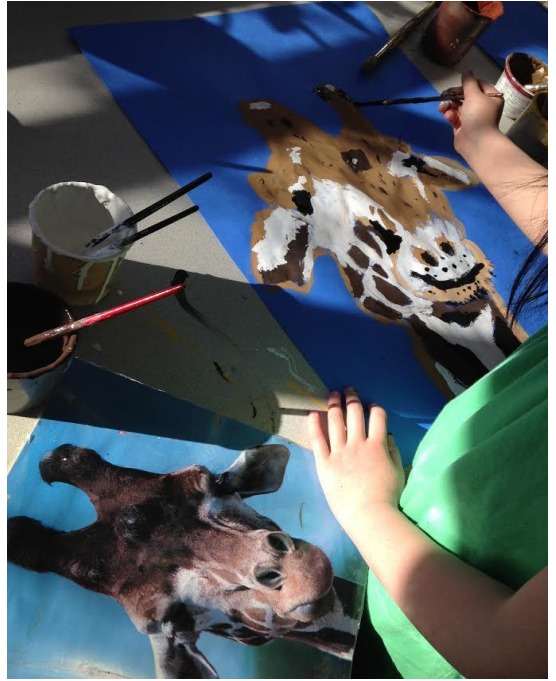
1. **Call to Order** (7:00)
2. **Chairman's Introduction** – *Amy Krishnamurthy*
3. **Public Participation**
4. **McCarthy-Towne School Presentation** – *Principal David Krane* (7:10)
5. **Douglas School Presentation** – *Principal Chris Whitbeck* (7:40)
6. **Battery Storage Project Agreement Authorization** – Possible **VOTE** – *JD Head* (8:10)
7. **Boxborough Town Meeting** (*begins May 14*) – *Brigid Bieber* (8:20)
 - 7.1. Boxborough Leadership Forum (BLF) Update
 - 7.2. Town Meeting Preparations
8. **2018-2019 School Committee Meeting DRAFT Calendar** – *Amy Krishnamurthy* (8:25)
9. **Subcommittee Reports** (8:35)
 - 9.1. **Policy**
 - 9.1.1. Discipline of Students with Disabilities, File: JKF – Third Read – **VOTE** - *Dawn Bentley*
 - 9.1.2. Minutes, File: BEDG – Second Read – **VOTE** – *Diane Baum*
 - 9.1.3. Remote Participation, File: BEDJA – Second Read - **VOTE** - *Diane Baum*
 - 9.1.4. Research Requests from Outside the District, File: NEW – Second Read – **VOTE** – *Deborah Bookis*
 - 9.1.5. First Aid, File: EBB – First Read – *Dawn Bentley*
10. **School Committee Member Reports** (*oral*) (8:45)
11. **Consent Agenda – VOTE** (8:50)
 - 11.1. **Statement of Warrants & Approval of Minutes** (4/2/18 & 4/12/18)
 - 11.2. **Donations to our Schools** – *Bill McAlduff*
 - 11.2.1. AB Travel Basketball Program Donation of 4 Backboards
 - 11.3. **Approval of High School Field Trip** to Greece and Italy, April 2019 - **VOTE**
12. **FYI**
 - 12.1. Family Learning Series - FY18 Calendar of Presentations
 - 12.2. Save the Date: District Retirement Celebration on June 14th at 3:15 p.m.
13. **Adjourn** (9:00)

Next School Committee Meetings: May 17, June 7 and June 21

Posted 4/23/18 at 6:00 p.m.

Visual Arts Integration

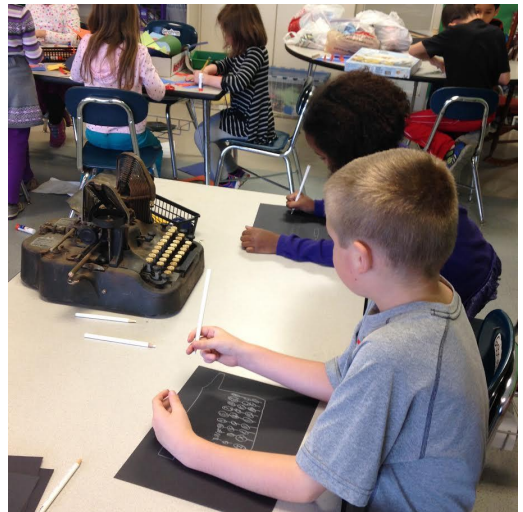
McCarthy-Towne
School



Visual Arts Integration

While students visit the Visual Arts Studio weekly, Visual Arts are also fully integrated into the curriculum.

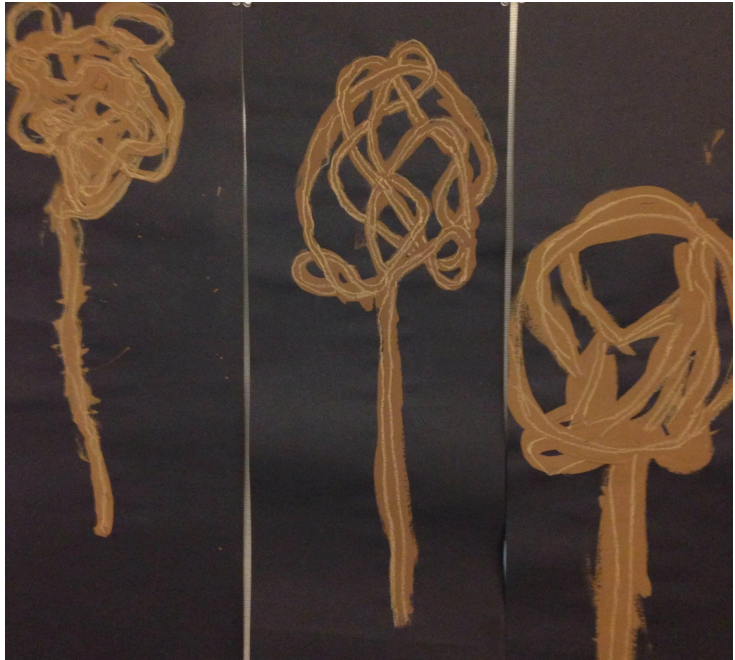
When approached in this way, it leads to new learning and a deeper understanding of the content.



The Process

It is important for the students not to have a preconceived notion of the outcome.

Students can show strengths and challenges in their own learning style through art.



Quality Artist Materials

It is important for the students to have quality artist materials to use.

Students need to be introduced to different kinds of materials and be taught how to use them.



From the Inside Out

Creating art from the inside out allows students' work to be more fluid and not constrained by an outline.



Mistakes are Okay

Students should be encouraged to work with a mistake.

They may need support while working through this process.

This provides risk taking, problem solving, and flexibility.



Timeframe

Student work can be ongoing.

It may take several days, or several weeks to complete one project.

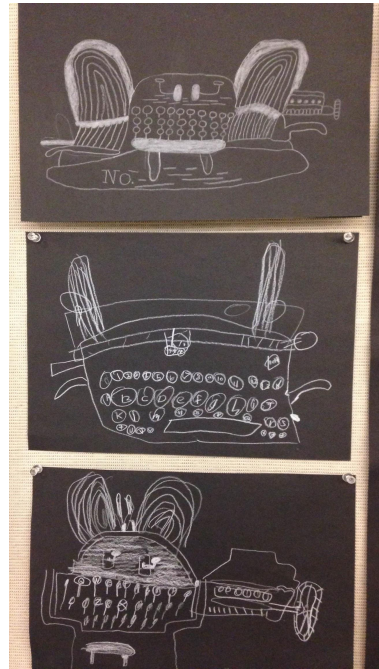


Reflection

Talking about art gives it a voice.

Students are taught to notice how art is successful in different ways.

Students can verbalize what was important to each individual.



Educationally speaking, what the student learns through doing artwork remains silent in that work unless it is witnessed by others and given voice through what they too can see in it.

- Margot Grallert

Survey Results

Balancing the need to continue doing older projects that are important to the history of McT and being creative with introducing new projects. It's hard for me to tell what is okay to let go.

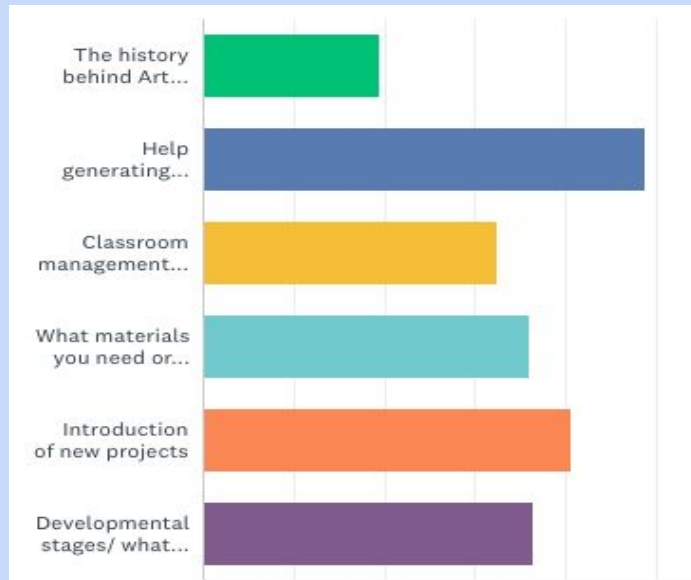
Art in the classroom - integrated or not - is always fun, relaxing, rewarding - the kids love it. I love it.

Students become calmer, more reflective.

Sometimes hidden talents and strengths are revealed through the process; that can be quite empowering and rewarding.

It provides students a different outlet to show what they can do

It helps students to work on planning, impulse control, and many other learning habits of mind that are directly related to their academic success.



Agenda for Visual Arts Integration:

- Managing Art in the Classroom
- Integrating Art into the Classroom
- Exploring Various Materials
- Talking with Students about Art
- Reflecting on Art with Students
- Displaying Art - Presenting vs. Decorating

Allows for a Deeper Understanding of Content





Acton-Boxborough Regional School District

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JD Head

Director of School Operations

April 23, 2018

TO: William McAlduff, Interim Superintendent of Schools
FROM: JD Head, Director of School Operations
RE: **Battery Storage Project Agreement Authorization**

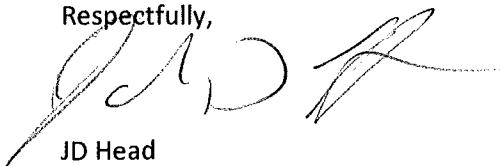
The purpose of this memo is to present the AB School Committee with an opportunity to review the battery storage project schematic, term sheet, and proposed draft agreement. The information here is for review and no action needs to be taken at this time. To move the project forward we would ask that the School Committee take a vote at the May 17th meeting authorizing the District to enter into a project agreement.

Attached with this memo is a press release from the Baker-Polito Administrative offices regarding the grant awards that this project is part of, as well as, the original Project Narrative, a proposed site plan, a finalized term sheet, and a draft agreement. All documents have been reviewed by legal and only some minor language nuances remain to be worked out in the draft agreement itself. These minor items will be resolved prior to the May 17th meeting.

Departmentally we are extremely excited about this opportunity, as battery storage and energy demand curtailment is undoubtedly the direction the industry is going in as it relates to large-scale facility management. This project specifically presents our Department with an opportunity to learn to work with this new technology given us a competitive advantage in the market place. Most notably to the public at large, this project will require no capital investment from ABRSD at all and will result in minimally \$948,096 in revenue to the District over the ten-year term. Additionally, this project will present the Department with another curricular resource for the work Kate Crosby does with the many students she works with District wide.

Please let me know if there is any additional information I can provide. I would be happy to do a short presentation on the topic if needed. I would also be happy to respond to any questions or comments through appropriate channels at any point leading up to the May 17th meeting.

Respectfully,



JD Head

Our Mission is to prepare all students to attain their full potential as life-long learners, critical thinkers, and productive citizens of our diverse community and global society.

I. Potential of the Proposed Technology to be Deployed:

EnerNOC (ENOC) proposes to install, control, and maintain a 2MW/4MWH Li-Ion battery energy storage system (BESS) at the Acton-Boxborough Regional School District (ABRSD) in Acton, MA. ABRSD is a comprehensive, public PreK-12 school system serving 5,700 students. ABRSD, the only school district in the state with a dedicated Energy Manager, has achieved striking energy reduction successes with 1) its 2010 installation of solar panels and 2) its broad roll-out of behavioral-based energy conservation strategies in combination with lighting, HVAC, and building envelope upgrades. EnerNOC's application team is excited to bring ABRSD and the Commonwealth's Energy Storage Initiative additional long-term energy management benefits with our BESS, a turnkey outdoor-rated energy storage system, including AC/DC protection, power conversion, energy storage, thermal management, fire detection/suppression, and control algorithms that optimize the economic charging and discharging of the battery.

EnerNOC first enrolled ABRSD in the ISO-NE demand response (DR) program in 2009. The BESS will allow for greater enrollment at ABRSD, as well as new demand management opportunities – including the provision of additional grid services and enhanced behind the meter value creation. Through close integration between the EnerNOC platform and the local controller in the BESS, all of these applications will be pursued and “stacked” in parallel, creating a business case for a storage project that would be untenable otherwise.

The application team has selected proven Li-Ion technology, a low maintenance, extended shelf-life solution that has a simple charge algorithm and short charge times, making it particularly attractive for our multiple benefit stream model. This is the preferred battery solution at this time in terms of performance, cost, size, safety, and commercial availability and can address many of the Commonwealth's energy objectives.

The Town of Sterling broke ground on a Li-Ion BESS in October 2016, proving the feasibility here in MA. Our site visits to ABRSD confirm sufficient space and appropriate siting for an outdoor Li-Ion solution and that the metering and construction requirements are feasible, technically and financially. EnerNOC is closely engaged with ABRSD and key stakeholders on their energy and facilities team. Their interest in pursuing the project is evidenced by the LOI in Attachment G and the streamlined permitting process herein, both making it clear that the project is viable and subject to minimal risks. Our application team is confident that we can successfully deploy a BESS at ABRSD.

EnerNOC and National Grid Ventures (a global non-regulated subsidiary of National Grid) will be co-developers on the project, with EnerNOC responsible for the customer relationship, system operations, and market participation, and National Grid Ventures for project sponsorship and underwriting. Borrego Solar will source the system components from vendors following project award and will be fully responsible for the system installation.

II. Potential of the Energy Storage Use Case/Business Model:

Business Model

Though BESS costs are falling rapidly, the still significant upfront capital requirements, lack of storage-specific tax credits, and relatively limited deployment history make customer investments in this technology a challenge. Accordingly, our model is to deploy the BESS under an energy services contract, whereby ABRSD has no upfront capital requirements or on-going financial risk, and all parties share in the economic value created by the BESS.

Such an approach can face challenges, from investor comfort in the forecasted revenue streams to customer credit risks. Our partnership with National Grid Ventures brings a source of capital for BESS investment and ownership from a highly credible investor. This, coupled with EnerNOC's market expertise and positions (discussed below), addresses a main commercialization challenge. ABRSD's investment-grade credit rating further mitigates project execution risks. By engaging in this demonstration project, the Application Team will help validate this business model in order to facilitate commercial scaling. We believe that a service-based approach to BESS deployments will significantly improve customer uptake of the technology, as was seen for solar PV with the advent of the PPA model.

Energy Storage Use Case and Differentiating Factors

To date, most BESS behind-the-meter (BTM) installations have focused on demand charge management (DCM) savings. Often, these are viable only when deployed alongside solar, where the BESS only addresses peaks not covered by solar, and where the BESS may be able to take advantage of the investment tax credit (ITC,) depending on its charging methodology. By contrast, our proposed deployment leverages value stacking – specifically through the inclusion of multiple grid service revenues – to build a business case. Because our BESS capacity is sized for the

provision of grid services and not solar firming, there is also increased technical ability to provide additional services, as they become available. With falling equipment costs and the potential for benefits that are currently non-monetizable (see Attachment F), this model will increasingly become viable across a wide range of customers. As EnerNOC has obtained Market Based Rate Authority from FERC, we can monetize energy exports from BTM BESS in wholesale markets, in addition to measured reductions.

The BESS will be used for at least five different value streams for the grid and for the customer, as explained further below – and in the Budget Narrative:

- ISO-NE FCM: Historically it has been challenging to secure third party project finance for BTM storage projects where a significant portion of the project value comes from grid services. However, EnerNOC has secured historically-high FCM pricing for half of the BESS project life, through 2023. Because of market integration beginning in the 2018 delivery year, all FCM capacity – including from the ABRSD BESS – must also offer into either the energy or reserves market. Accordingly, the FCM actually represents a minimum of two applications, as the BESS will also be participating in the ISO-NE wholesale energy market.
- ISO-NE Forward Reserves Market: EnerNOC plans to enroll the BESS into the 30-minute forward reserves market to provide energy reserves during the on-peak period. This aligns well with planned FCM participation, as FCM assets must participate in energy or reserves beginning in June 2018 to satisfy capacity supply obligations.
- ISO-NE Frequency Regulation (FR): EnerNOC will also enroll the BESS in the ISO-NE FR market as an Alternative Technology Regulating Resource (ATRR), where revenues are available during the off-peak period, unlikely to with DCM and likely FCM dispatch hours.
- Demand Charge Management (DCM): Through intelligent algorithms the BESS will reduce distribution-level demand charges, by forecasting facility load and discharging during on-peak hours per its Eversource B3 tariff, and charging during off-peak hours.
- Installed Capacity (ICAP) Tag Reduction: ABRSD is on a pass-through supply tariff and actively shaves load in an effort to reduce its ICAP tag. The BESS will enable further demand reductions, and/or load shedding on days when curtailment is not possible.

Project Success

Our financial targets for the project align with success metrics that will enable commercial viability for such models. Specifically, the project will provide attractive retained savings realized by the host customer (ABRSD) and reasonable returns for the investor and owner of the BESS (National Grid Ventures), as shown in Attachment F. Note, these figures are indicative as final commercial terms will be dependent on the grant award. Financial outcomes are inherently linked to the technical performance of the BESS, primarily the forecasted degradation of the BESS. Our current target is 1.5%/year, which we hope to out-perform during operations.

Provided battery costs continue to fall and there is increasing ability to realize BESS-created values that are not currently monetizable, this model is repeatable elsewhere in MA. Accordingly, successful demonstration projects will cause EnerNOC to accelerate the scaling of its storage initiative in the Commonwealth. EnerNOC intends to pursue larger future positions in ISO-NE FCM, recognizing that battery storage could increasingly become part of our portfolio. We are currently taking steps to significantly increase our FCM position, and the delivery period for the upcoming FCA 12 auction coincides with a steep reduction in battery storage costs. Specifically, BESS costs are forecasted to have declined by as much as 50% compared to current pricing¹ – and consequently, the US market for BTM storage is expected to grow to 1GW.²

III. System Benefits:

The diverse use cases featured in this demonstration project will provide a number of system benefits, including:

Avoided transmission and distribution costs. Our BESS will respond during on-peak periods and will therefore provide benefits to the T&D system, avoiding T&D costs. The MA program administrators (PAs) have estimated that the ability to reduce load during the top 40 hours of the summer alone is worth \$84/kW-yr in terms of distribution benefit, as well as \$10/kW-yr in transmission benefits³. MA currently lacks the commercial-scale price signals to realize the

¹ GTM Research, The Economics of Commercial Storage in the US, July 2016

² GTM Research "Grid Edge Quarterly Executive Briefing Q4 2016," December 2016, p 57.

³ MA EEAC Meeting, "Update from PAs on Demand Savings Group," June 21, 2016

economic benefits of peak shaving as it relates to transmission and distribution costs. BESS are highly flexible resources that can provide peak reductions beyond the use cases identified in this proposal. In optimal market conditions, MA-based programs would enable remuneration for these benefits, improving the business case for the deployment of distributed energy resources like storage – as well as enabling better system planning. For example, NY State has successfully operated dynamic load management programs in each distribution system to reduce demand during such periods, and, accordingly, compensated customers who successfully provide the reductions. In NYC, for example, a customer can earn between \$180 to \$250/kW-year in capacity remuneration for these distribution level programs alone. The planned and existing pilot programs for such DR opportunities by the MA PA's are an encouraging step towards being able to capture this currently non-monetizable benefit.

Reduced and Avoided Energy Costs. The regular BESS discharge during on-peak periods will significantly reduce on-peak energy consumption. By engaging in DCM and reducing consumption during on-peak periods, the BESS project will naturally avoid on-peak energy consumption, thereby reducing demand for energy during those times at the wholesale level. For 2018, this value is estimated to be \$.0735/kWh during the top four hours of the MA-NEMA peak, and \$.0581/kWh during the rest of the summer peak hours. By 2028, the proposed end of the BESS project, these values will increase to \$.1067/kWh and \$.0834/kWh, respectively.⁴ Moreover, by participating in DR – especially when the FCM is wholesale-market integrated – DR will reduce demand during periods of high wholesale LMP; the corresponding DR has been shown to have an impact on wholesale price, known as Demand Response Induced Price Effect (DRIPE). For 2018, this value is estimated at \$.0435/kWh during the top four hours of MA-NEMA peak, and \$.0333/kWh during the rest of the summer peak hours.

It is also important to note that societal benefits could far exceed these forecasted averages. For example, ICF International found that during the Polar Vortex New Englanders could have saved roughly \$4 billion in wholesale electricity costs if the energy system had not been so constrained⁵ (the top four hours of the MA-NEMA peak during the Polar Vortex were \$.784/kWh).

Wholesale Capacity Cost Price Suppression. Incremental DR participation in the ISO-NE FCM has been estimated to reduce capacity costs for all market participants. This same impact has been reported in other markets, such as PJM. The avoided cost from capacity price suppression has been estimated to equal \$396,230 / MW.⁶

Reduced GHG Emissions. On high electric demand days (HEDD), ISO-NE's CO₂/MWh figure increases from an annual system average of 747 lb/MWh to 1083 lb/MWh⁷. Applying these HEDD profiles and the average GHG profile of MA (934lb/MWh), avoided consumption during these periods saves 149 lbs / MWh of CO₂. Using the EPA's 2015 social cost of carbon⁸ (less amounts already captured by the Regional Greenhouse Gas Initiative), that translates to an avoided GHG value of \$2.68/MWh.

In total, the BESS will generate substantial non-monetizable benefits; how and when these benefits may be converted into tangible price signals remains highly uncertain. We include an analysis of hypothetical value of non-monetizable benefits in Attachment F.

Both the BESS and the main meter at ABRSD will be enabled with remote monitoring equipment, allowing for the measurement and capture of consumption data and BESS charge/discharge data. Data, which will be shared with the MassCEC, will enable retained program consultants to research benefits from the ACES projects. All data will be capable of being remotely accessed and will have a minimum of 30-day, onsite data storage.

IV. Installation Plan:

Borrego Solar will provide turnkey engineering design, procurement, and construction of the BESS, which will be located on the northwest corner of the campus, adjacent to parking for the high school. The area proposed for the energy storage system is approximately 20' wide by 80' long, providing enough space with code-required working clearances for an 8.5' by 40' lithium-ion DC battery container, a pad-mounted power-conversion system (with a single

⁴ Addendum to Avoided Energy Supply Costs in New England: 2015 Report, Appendix B, Table One; prepared for the Avoided Energy Supply Component (AESC) Study Group; Tabors Caramanis Rudkevich (TCR), March 7, 2016

⁵ ICF International, <https://www.forbes.com/sites/judeclemente/2016/06/26/new-englands-known-need-for-more-natural-gas-pipelines/#67d6c9eb30a0>

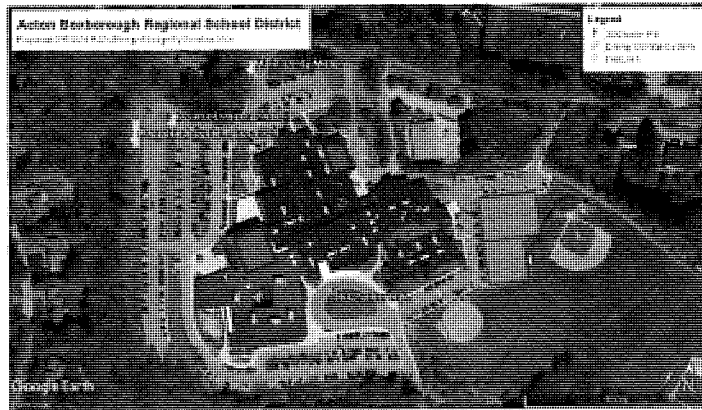
⁶ Peak Demand Reduction Strategy, Advanced Energy Economy (Navigant Consulting); October 2015. Table 3.5. \$248,041,000 / 626 MW = \$396,231

⁷ https://www.iso-ne.com/static-assets/documents/2017/01/2015_emissions_report.pdf

⁸ https://www.epa.gov/sites/production/files/2016-12/documents/sc_co2_tsd_august_2016.pdf

2000 kVA PCS, or two 1000 kVA PCS mounted in a common cabinet), and step-up transformer to interconnect at the main campus loop at 13.8kV. The proposed point of interconnection will be a riser pole on ABRSD's side of the campus main utility meter. This location is most suitable for the BESS, as it is proximate to the utility-side of the campus loop (downstream only of the first step-down transformer serving the high school), physically distanced from vehicle and pedestrian traffic, and will not impede sight lines from the school.

The existing site will require some excavation to provide a level footprint for the system, after which concrete pads or spread footings will be poured to support the battery container, power conversion system, and step-up transformer. Site subcontractors will dig electrical trenches and lay conduit between the DC battery container, PCS equipment pad, and step-up transformer pad. Once foundations are in place, the electrical subcontractor will coordinate craning and rigging to place the equipment on the pads. The electrical subcontractor will install energy storage



modules, shipped separately per DOT regulations, within the racks secured within the container, and pull DC and AC electrical cable through conduits and complete terminations at major equipment. A qualified electrical subcontractor will install a new riser pole with pole-mounted recloser, and connect medium voltage cable overhead to the existing 13.8kV campus loop. The construction team will install communications wiring to link the controls system, EnerNOC site server, and required remote terminal unit (RTU) to participate in ISO-NE wholesale markets. Commissioning will be completed by Borrego and the system integrator. Interconnection witness testing will follow Eversource's guidelines for interconnecting distributed generation.

Permitting risks are limited for this project, as the ABRSD Committee has jurisdiction over all site use and construction within the property area. The project team will work closely with all stakeholders in order to address any unforeseen siting or safety concerns posed by the School Committee.

V. Safety Plan:

The BESS modules will be certified to the UN 38.3 standard and listed to UL 1642 and UL 1973. The power conversion system will be compliant with IEEE 1547-2003 and listed to the UL 1741 standard for interconnecting distributed generation. The system will be designed in accordance with NFPA 70: National Electrical Code, and installed according to NFPA 70E requirements. An arc flash study will be performed to determine appropriate personal protective equipment required for safe installation and operation.

VI. Budget Narrative:

Methodology & Assumptions. The revenue and savings forecasts shown in Attachment F are the results of detailed Monte Carlo analysis in our battery storage project design and performance simulation tool. A rules-based economic engine drives prioritization of battery operations, and certain applications have pre-configured priorities to ensure performance based on market obligations.

- FCM: Assumes DCM is interrupted with 30-minute notice, battery is allowed to charge before event start, and BESS can export to grid during dispatch. Though FCM was historically dispatched <2X per year, our simulation tool assumes multiple dispatches per season (given the likelihood of economic-based dispatch with market integration in 2018) to accurately assess available battery state of charge due to DCM operations (all measured under ISO-NE CBL methodology), as well as the impact on DCM savings. Actual contracted EnerNOC FCM pricing is used for the first 5 project years, and FCA11 clearing price are carried forward for the balance of the term.
- FR30: The dispatch model for the BESS also includes ISO-NE Forward Reserves Market enrollment, which has a 30-minute response time. We assume that the majority of events are coincident with FCM dispatches, given market integration. Recent clearing prices for each season are used and performance is measured using CBL.



- FR: BESS participates as ATRR in ISO-NE Regulation market during the non-peak periods, which fluctuate by season, and 80% performance factor is assumed. BESS is able to export within the technical constraints of the system. Third party market forecasts, which include the impact of new storage resources entering the market, are used for forward revenue projections.
- DCM: Historical interval data and tariff rate bands are used to forecast DCM performance, with 15% of battery capacity kept in reserve to account for forecast error. The BESS does the maximum possible within its technical constraints to shave peak consumption during relevant tariff bands, which change by season. We assume no escalation of utility tariff-based demand charge benefits over time.
- ICAP: Based on historical performance of EnerNOC’s ISO-NE peak predictor software, we assume 5 dispatches per year on a day-ahead basis to ensure that the single system peak is hit. Existing load curtailment capability on site is already factored in so only additional BESS demand reductions are counted. Cleared ISO-NE capacity prices are used through 2021, after which the most recent clearing price is carried forward.

Budget Costs.

The majority of the project cost is directly attributable to the hardware cost of the integrated BESS, as furnished by Borrego. Additional material costs are attributable to the controls, including a remote terminal unit for ISO-NE wholesale market participation, AC disconnects and overcurrent protection required for interconnection, revenue-grade system metering, vacuum-interrupter recloser with protective relays, a riser pole with fused cutouts and 15kV load-break switch to tie in to the campus 13.8kV loop. We also include the cost of a neutral grounding reactor on the primary side of the transformer, assuming this requirements for effective grounding on the system, where the power conversion system requires floating wye or delta 3-phase AC output. Finally, we include estimated costs based on vendor quotes for 3rd party telemetry infrastructure, which EnerNOC plans to use in order to achieve ISO-NE Frequency Regulation rule compliance. Specifically, an ATRR asset must be telemetered and capable of receiving an automatic generating control signal in 4-second intervals. Direct labor resources are required for the design and specification, acquisition of permits, financing, interconnection study, procurement and construction management. Subcontractors are required to assist in design and specification, as well as receiving equipment on site, civil site work, and electrical installation. We estimate interconnection costs for a project of this size to be approximately \$100,000, assuming the utility studies the BESS as an interconnecting distributed generation asset like solar PV.

The inability to fully capture all the identified non-monetizable benefits represents an opportunity cost of more than \$4.6M over the contemplated 10-year project life (excluding any benefit from avoiding extreme price spikes). While most of this is related to forecasted capacity price suppression, the other non-monetizable benefits total an excess of \$1M during the project. The requested grant funding will enable the demonstration project to be economically viable without the value of these benefits.

VII. Applicant Team Commitment and Qualifications:

The Application Team is highly qualified to deliver at ABRSD. The primary team member from each organization is highlighted below. Additional team member information, including experience, interest, and intra-team relationship details, is available in the supplemental documentation to this attachment and in the Letters of Intent.

Team Member	Company	Title	Years Experience	Highest Degree	MA office?	ACES project role
Amy Roschelle	EnerNOC	Sr Manager, DER	14	MBA, MIT	YES	Dedicated DER Project Manager
Kate Crosby	ABRSD	Energy Manager	8	MS, Antioch University	YES	Dedicated Site Energy Manager; Site Control /Authority
Jackson Lehr	National Grid Ventures	Director, DER Development	10	MBA, Harvard	YES	Co-Developer / Project owner
John DuPont	Borrego Solar, Energy Storage	Director, Technology & Ops	7	MS, Stanford	YES	EPC

PRESS RELEASE

Baker-Polito Administration Awards \$20 Million for Energy Storage Projects

Funding Highlights Second Phase of Administration's Energy Storage Initiative

FOR IMMEDIATE RELEASE:

12/07/2017

Governor Charlie Baker | Lt. Governor Karyn Polito

Matthew Beaton, EEA Secretary

Judith Judson, DOER Commissioner

Governor's Press Office

MEDIA CONTACT

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gov.press@state.ma.us



MARLBOROUGH — The Baker-Polito Administration today awarded \$20 million in grants to 26 projects that will develop the Commonwealth’s energy storage market and deliver benefits to Massachusetts ratepayers and the electrical grid. Recognizing the potential benefits energy storage holds for the Commonwealth, paired with the strength of submitted projects, the Administration doubled the available funding from the initial \$10 million commitment. The awarded projects will benefit 25 communities and draw in \$32 million in matching funds, helping to grow the Commonwealth’s energy storage economy.

The grants were awarded as part of the Baker-Polito Administration’s Energy Storage Initiative (ESI) Advancing Commonwealth Energy Storage (ACES) program, funded by the Department of Energy Resources (DOER) through Alternative Compliance Payments (ACP) and administered by the Massachusetts Clean Energy Center (MassCEC). The announcement was made by Governor Baker during an event at UMass Memorial – Marlborough Hospital. The critical care facility will use funding received under the grant program to integrate a 400kw solar canopy and energy storage system, reduce energy use and costs, shave its peak demand and increase its overall resilience.

“The development and deployment of energy storage projects will be vital to the Commonwealth’s ability to continue leading the nation in energy efficiency,” said **Governor Charlie Baker**. “Funding these storage projects is an investment in our energy portfolio that will reduce costs for ratepayers and help create a clean and resilient energy future.”

“Massachusetts has a rich history of leadership in innovation and this storage grant program is another important step for the Commonwealth’s energy industry,” said Lieutenant Governor Kevin Polito. “We

look forward to these projects playing an important role in their local communities and delivering the many benefits energy storage can provide to Massachusetts ratepayers.”

Launched by the Baker-Polito Administration in 2015, the ESI aims to make Massachusetts a national leader in energy storage by analyzing opportunities to support energy storage companies, accelerating the development of early commercial storage technologies and developing policy options to encourage energy storage deployment. The first phase of the ESI, the *State of Charge* study released in September 2016, identified hundreds of millions of dollars of potential ratepayer benefits from the deployment of energy storage in Massachusetts. The study analyzed the benefits of 10 specific use cases to evaluate how storage economics vary by business model, market involvement and location. These awards represent eight of those use cases and an additional use case not previously identified in the report.

“Energy storage has the potential to revolutionize the energy sector in Massachusetts,” **said Secretary of Energy and Environmental Affairs Matthew Beaton.** “The Advancing Commonwealth Energy Storage program puts Massachusetts one step closer to realizing the hundreds of millions of dollars in system benefits and ratepayer savings that the deployment of energy storage can provide, while position the state to achieve its energy storage target.”

In June, in accordance with the bipartisan comprehensive *energy diversification legislation* signed by Governor Baker in August of 2016, DOER announced a 200 Megawatt hour (MWh) energy storage target for the state’s three electric distribution companies to achieve by January 1, 2020. The projects awarded under the ACES program represent a total of 32 MW and 85 MWh of energy storage capacity, of which 16 MW and 45 MWh are within electric distribution company territory. Massachusetts currently has approximately 4 MW and 7 MWh of advanced energy storage installed.

“Energy storage is a strategic opportunity for the Commonwealth to transform the way we utilize our energy resources,” **said Department of Energy Resources Commissioner Judith Judson.** “The projects receiving funding through the ACES program will provide a roadmap for how Massachusetts can integrate storage into our diversified energy portfolio to lower overall energy costs, increase grid efficiency by decreasing peak demand, and more effectively utilize our strong clean energy sector.”

“These projects represent a substantial step forward for the emerging energy storage sector in Massachusetts,” **said MassCEC CEO Stephen Pike.** “The Commonwealth’s leadership in developing this industry will allow renewable energy sources to be harnessed to their full potential and increase the resiliency of the electrical grid.”

The projects awarded funding are:

Location	Facility	Awardees	Amount
Acton	Education	EnerNOC	\$1,250,000

Ashburnham	Utility	Massachusetts Municipal Wholesale Electric Company	\$600,000
Boston	Education	UMass-Boston	\$850,000
Boston	Commercial	General Electric - Headquarters	\$221,000
Boston	Hospital	Boston Medical Center	\$403,000
Braintree	Utility	Borrego Solar Systems	\$700,000
Brockton, Leicester	Commercial	Advanced Microgrid Solutions	\$645,000
Clinton, Dracut, Leominster, Taunton	Commercial	Greenlots	\$439,000
Edgartown	Transit Authority	Martha's Vineyard Transit Authority	\$545,000
Everett	Hotel and Casino	Tesla	\$1,074,000
Lexington	Research Center	Solect Energy	\$1,000,000
Lunenburg	Utility	NuGen Capital	\$1,225,000
Marlborough	Hospital	UMass Memorial-Marlborough Hospital	\$686,000
Nantucket	Residential Sites	Tesla	\$1,250,000
New Bedford	Manufacturing	Borrego Solar Systems	\$700,000

Norwood	Biotechnology	NextEra Energy	\$500,000
Shirley	Utility	National Grid	\$875,000
Somerville	Commercial	Ameresco	\$348,000
Taunton	Utility	Taunton Municipal Light Plant	\$1,250,000
Various Locations	Residential Sites	Sunrun	\$561,000
Greater Boston	Commercial	Constellation	\$1,250,000
Vineyard Haven	Agriculture	WH Bennett	\$382,000
Wakefield	Utility	Massachusetts Municipal Wholesale Electric Company	\$800,000
West Boylston	Utility	West Boylston Municipal Light Plant	\$243,000

Additional information on the funded projects can be found [here](#).

Energy storage technologies include batteries, flywheels, thermal storage, and pumped hydroelectric storage, which are capable of storing energy during off peak periods when costs are low and then make energy available during peak periods when costs are higher. Energy storage also makes it possible to increase the effectiveness of renewable energy sources, like solar, by storing energy generated during the day for use at night. Energy storage can also provide power during outages, result in greenhouse gas reductions, and increase the electric grid’s overall reliability and resilience.

“We are appreciative of Governor Baker and his administration for their support of Marlborough and our important community resources like Marlborough Hospital. This program through the Baker-Polito Administration, DOER and MassCEC will help create a new energy storage industry here in Massachusetts,” **said Marlborough Mayor Arthur Vigeant**. “UMass Memorial Hospital’s leadership in this industry is demonstrated by its innovative proposal to combine energy storage with CHP and solar to create a unique microgrid that will allow this critical facility to continue to operate even in a widespread

“On behalf of UMass Memorial Health Care and Marlborough Hospital, we are appreciative of the Baker Administration’s support of initiatives that promote and ensure safe, resilient and reliable energy infrastructure. We all must continue to look at ways to reduce greenhouse gas, cut energy costs and provide a cleaner healthy environment for our community,” **said Steve Roach, President and CEO, UMass Memorial – Marlborough Hospital.**

“With this innovative grant program Massachusetts continues to demonstrate its leadership in clean and resilient energy solutions,” **said State Representative Danielle Gregoire (D-Marlborough).** “I commend the Baker-Polito Administration, DOER and MassCEC for their hard work and congratulate UMass Memorial Hospital for being awarded this grant which will demonstrate a cutting edge energy efficient and resilient microgrid at a critical facility in Massachusetts.”

“Recent advances in energy storage technology will transform the way homes and businesses in communities across the Commonwealth interact with energy resources,” **said State Representative Carmine L. Gentile (D-Sudbury).** “This funding will allow UMass Memorial Hospital and many others to take full advantage of the potential of renewable energy sources and promote the expansion of a clean, resilient, reliable, and responsible energy infrastructure in Massachusetts.”

“I want to thank the Baker-Polito Administration, DOER and MassCEC for launching this smart grant program that allows the state to identify energy-storage solutions throughout Massachusetts,” **said State Senator Jamie Eldridge (D-Acton).** “Energy storage is critical to building a resilient clean energy grid for the future, and I want to congratulate UMass Memorial Hospital in Marlborough and the Acton-Boxborough School District for demonstrating how to produce savings while providing clean, reliable energy.”

“The Advancing Commonwealth Energy Storage grant program is an important component of the Baker-Polito Administration’s ongoing commitment to promoting more clean energy sources and expanding the state’s energy storage capacity,” **said House Minority Leader Bradley H. Jones, Jr. (R-North Reading).** “This funding will enable the Reading Municipal Light Department to better manage peak energy demand while also providing RMLD customers with more reliable and cost-effective service.”

“The North Reading proposal will provide significant value to the region,” **said Senate Minority Leader Bruce Tarr (R-Gloucester).** “Energy storage is critical to unlocking the full potential of renewable energy generation, peak demand response capacity, and robustness of the grid. Using this unique lithium ion system will help our environment and economy.”

“These grants demonstrate the Commonwealth’s continued commitment to being a leader on clean energy and resiliency” **said House Speaker Pro Tempore Patricia Haddad (D-Somerset).** “I am pleased that Taunton Municipal Light Plant has been chosen to participate and will be undertaking an innovative battery storage project with a new solar array.”

“The advances taking place in energy storage will change the game and keep our power flowing efficiently at both low- and peak-power periods” **said Senate President Pro Tempore Marc R. Pacheco (D-Taunton)**

these grants will help our communities take advantage of this technology and help them save money while making our grid as clean and stable as possible.”

“The Northeast Clean Energy Council congratulates the companies and projects announced today as well as the Baker Administration for its leadership in kick-starting the Commonwealth’s energy storage market,” **said Northeast Clean Energy Council President Peter Rothstein.** “We look forward to seeing these and many other energy storage projects come online to demonstrate new business models and bring significant value to Massachusetts through monetary savings, high-priority energy and environmental policy impacts, grid management and resiliency benefits, and economic growth.”

Since releasing the study, DOER has implemented a majority of the report’s recommendations to promote energy storage in the Commonwealth. They include, but are not limited to, becoming the first state in the nation to incentivize the pairing of energy storage with solar in the new proposed solar incentive program, SMART; conducting solar-plus-storage feasibility studies for Massachusetts manufacturing companies; authorizing the pairing of energy storage technologies with the largest procurement of clean and offshore wind energy generation in state history, 9,450,000MWh of clean energy generation and 1,600MW of offshore wind energy generation; continued energy storage grant opportunities through the Community Clean Energy Resiliency Initiative; and funding energy storage projects through the Peak Demand Reduction Grant Program.

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Peter Lorenz, Director of Communications & Public Affairs





SUMMARY OF TERMS

This Summary of Terms (“**Term Sheet**”) outlines the principal terms of the proposed Energy Storage Agreement (“**ESA**”) between EnerNOC, Inc., a Delaware corporation (“**EnerNOC**”), and Acton-Boxborough Regional School District, a [Massachusetts [•] (“**ABRSD**”). Each of EnerNOC and ABRSD are sometimes referred to as a “Party” and collectively as the “**Parties**.” This Term Sheet is not binding (other than “Confidentiality” and “Exclusivity/No-Shop” below) and is conditioned on the completion of legal review, necessary management approval and documentation that is satisfactory to each Party. Each Party agrees to work in good faith in developing the ESA within the Contracting Period, as defined below. Should there be any inconsistency between this Term Sheet and the terms and conditions set out in the ESA, those in the ESA will prevail.

Proposed ESA Terms

<p>Project Summary</p>	<p>EnerNOC, together with its affiliates, will install, own, and operate a turnkey energy storage system (the “System”) at 16 Charter Road, Acton MA 01720 (the “Premises”) for the purpose of reducing ABRSD’s electricity costs (the “Project”). The Project is being funded, in part, through a \$1.25M award under the Advancing Commonwealth Energy Storage (“ACES”) program, administered by the Massachusetts Clean Energy Center (“MassCEC”).</p> <p>The System will be used across a number of various applications to maximize the economic benefit for ABRSD, through available sources of bill savings and market revenues (collectively, the “Services”), including (but not limited to):</p> <ul style="list-style-type: none"> - Installed Capacity Tag mitigation; - Demand charge management; - Participation in the Forward Capacity Market, operated by the Independent System Operator of New England (“ISO-NE”), including offering into the energy and/or reserves markets; - Demand response with local distribution utilities, including the Eversource Peak Demand Pilot, and its successors; - Enrolment in the ISO-NE Frequency Regulation market as an Alternative Technology Regulating Resource <p>As part of its operation of the energy storage system, EnerNOC will provide all necessary market services for enrolment of the Premises in demand response, including, but not limited to, auction participating and measurement and verification with ISO-NE.</p>
<p>Project Term</p>	<p>The ESA shall expire one hundred and twenty (120) months from the Service Commencement Date of the System (“Service Term”).</p>
<p>Target Service Commencement Date</p>	<p>The Parties intend for the Project to be operational no later than [December 31, 2018].</p> <p>In order to meet this date, ABRSD, agrees to reasonably support any necessary efforts, so long as such efforts are prudent operating practice, to design, permit, and install the Project, including:</p> <ul style="list-style-type: none"> - Execute any necessary permits, applications, or utility applications or agreements. For avoidance of doubt, securing the necessary permits and interconnection agreements for the Project is the responsibility of EnerNOC and its subcontractors.

	<ul style="list-style-type: none"> - Provide site drawing and layout documents - Enable access to the Premises to perform work
System Size and Location	<p>2000 kW / 4,000 kWh (operational capacity)</p> <p>The System will be located on the northwest corner of the campus, adjacent to the parking lot for the high school. The area proposed for the System is approximately 20' wide and 80' long.</p>
Benefit Share Summary	<p>EnerNOC shares all savings and revenue streams directly attributable to the System with ABRSD. EnerNOC believes this provides transparency and alignment with both Parties' objectives - to manage and reduce ABRSD's electricity expenses.</p> <p>Out of pocket upfront cost to ABRSD: \$0.00 Estimated Benefit over Project Term to ABRSD: \$948,096</p> <p>The Parties acknowledge that these shared savings figures are good-faith estimates of forward market prices and electricity costs, and recognize that should the realized benefits exceed the forecast, both Parties will share in this upside per the Benefit Share Methodology, as defined below.</p> <p><i>Benefit Share Methodology</i> The Benefit Share Methodology shall be defined as distribution of the benefits realized by the System in accordance with the calculations explained below.</p> <p>The sum of all bill savings and market and/or utility revenues realized by the operation of the System within a calendar year, net of energy costs directly attributed to System operations, shall be defined as the "Total Annual Benefit." The Total Annual Benefit shall be distributed among the Parties as follows:</p> <ul style="list-style-type: none"> - Twenty three (23) percent of the Total Annual Benefit shall be due to ABRSD; - Seventy-seven (77) percent of the Total Annual Benefit shall be due to EnerNOC. <p>For avoidance of doubt, the aforementioned Benefit Share Methodology reflects EnerNOC's exclusive rights to the ACES grant awarded by MassCEC and the ACES grant award will not be considered part of the Total Annual Benefit.</p>
Payment Procedure	<p>EnerNOC will monitor and calculate the savings for the entirety of the Project, accounting for both on-bill savings and demand response revenues. Access to a web dashboard containing savings information will be provided to ABRSD.</p> <p>Where savings realized directly on ABRSD's bill exceed the benefit due to ABRSD per the Benefit Share Methodology, EnerNOC will issue a written invoice to ABRSD for payment on a monthly basis (the "Service Fees"), in arrears. Where demand response revenues received by EnerNOC exceed the benefit due to EnerNOC per the Benefit Share Methodology, EnerNOC will issue payment to ABRSD, in arrears.</p> <p>Invoices and/or payments per the above procedure will be issued on a monthly basis based on actual savings and revenue streams. EnerNOC will also calculate the Savings Adjustment for each Calendar Quarter and provide ABRSD with a written Quarterly Statement. The Party owing the other based on the Savings Adjustment shall pay the amount due within thirty (30) days of receipt of the Quarterly Statement.</p>
System Installation	EnerNOC, or its affiliates or subcontractors, shall be responsible for the installation and

<p>and Removal</p>	<p>removal of the System.</p> <p>After the expiration of the ESA term, EnerNOC shall remove the System from the Premises and restore the Premises to its prior condition provided that EnerNOC shall not be required to remove any portion of the System below grade level that is not visible or otherwise.</p>
<p>Purchase Option</p>	<p>During a defined period in commencing in the fourth year of the Term, ABRSD shall have the option to purchase (the "Purchase Option") the right, title, and interest in, and to, the System free and clear of all liens other than permitted encumbrances (the "Option Interest"). The ESA will contain a schedule of Purchase Option fees for each year of the Term. In the event that ABRSD elects the Purchase Option, following payment of the Purchase Option fees to EnerNOC, the Benefit Share Methodology shall be as follows on a going-forward basis:</p> <ul style="list-style-type: none"> - Seventy-seven (77) percent of the Total Annual Benefit shall be due to ABRSD; - Twenty three (23) percent of the Total Annual Benefit shall be due to EnerNOC.
<p>Transfer or Relocation</p>	<p>ABRSD agrees to provide no less than one hundred and twenty (120) days' notice prior to the sale or transfer of ownership of the Premises ("Premises Transfer") to a non-Affiliate third party (the "Successor"). In the event of a Premises Transfer to a Successor, EnerNOC shall have the right, in its sole discretion, to determine whether to (a) provide the Services and System at the Premises to Successor, or (b) provide the Services to ABRSD at its new location (the "New Premises") so long as there was an Acceptable Relocation and with ABRSD's consent.</p> <p>To be considered an Acceptable Relocation, (i) EnerNOC, at its sole discretion, must have determined that the New Premises could support the operation of the System with substantially-similar Total Annual Benefit to that of the Premises, and (ii) ABRSD must pay, at its sole cost, for the removal of the System from the Premises and the installation of the System at the New Premises by EnerNOC (or its affiliates and/or subcontractors). In the event of an Acceptable Relocation and with ABRSD's consent to continue such services at the New Premises, ABRSD shall agree to extend the Service Term for a period of time as is reasonably necessary for EnerNOC to recover all Total Annual Benefits lost or diminished by the removal, transport, and re-installation of the System, as such period of time is reasonably determined by EnerNOC.</p>
<p>Host Event of Default, Remedies</p>	<p>In the event that ABRSD, (a) fails to pay EnerNOC any applicable Service Fees due under the ESA and such breach remains uncured for thirty (30) Business Days following written notice of such breach to ABRSD, (b) commences voluntary case under bankruptcy law, (c) is subjected to an involuntary bankruptcy proceeding against ABRSD that remains undismissed or undischarged for ninety (90) days, (d) materially breaches its obligations under the ESA and that breach remains uncured for thirty (30) days after EnerNOC provides written notice to ABRSD or (e) ceases to conduct business or operate at the Premises, and Successor Assignment or Acceptable Relocation (defined above) are not possible, the event(s) shall constitute an event of default (each a "Host Event of Default"). In such a Host Event of Default, and such default has not been cured during the applicable cure period, EnerNOC may terminate the ESA by written notice to ABRSD, and upon such termination, EnerNOC shall be due Service Damages, which shall be outlined in ESA Exhibit G. The Service Damages for each year of the ESA term shall be calculated based on the following methodology: the net present value of lost EnerNOC profits, minus the estimated residual cost of the</p>

	<p>System, net of forecasted uninstallation and removal expenses.</p> <p>Notwithstanding, if ABRSD is unable to pay EnerNOC because the relevant Governmental Authority has not provided allocated the necessary funds to ABRSD, ABRSD shall notify EnerNOC in writing of its failure to receive such funding (the "Funding Notice") and for a period of eighteen (18) months following EnerNOC's receipt of the Funding Notice (the "Suspension Period"), this failure to pay shall not result in a Host Event of Default, provided that:</p> <ul style="list-style-type: none"> (i) ABRSD agrees to make commercially-reasonable efforts to secure alternative funding for the Project, and/or work to have funding allocated by the relevant Governmental Authority (ii) During the Suspension Period, any outstanding Service Fees shall accrue, with 5% interest per annum, and remain due and payable to EnerNOC. <p>For avoidance of doubt, if ABRSD is unable to pay EnerNOC its applicable Service Fees at the conclusion of the Suspension Period, the failure to pay shall constitute a Host Event of Default and EnerNOC shall be due Service Damages as outlined in ESA Exhibit G.</p>
Insurance	<p>EnerNOC shall maintain throughout the ESA term insurance coverage for the System, which shall include, comprehensive general liability insurance for injury to or death of any Person or damage to property in connection with the use, operation or condition of the System of not less than two million, seven hundred thousand dollars (\$2,700,000) annual aggregate.</p> <p>ABRSD shall maintain throughout the ESA term insurance coverage which shall include comprehensive general liability insurance against liability for injury to or death of any Person or damage to property in connection with the use, operation or condition of the Premises of not less than two million dollars (\$2,000,000) annual aggregate.</p> <p>Additional insurance requirements shall be further detailed in the ESA.</p>
Limitation of Liability	<p>EnerNOC's maximum liability under the ESA shall in no event exceed five million four hundred thousand dollars (\$5,400,000). Neither ABRSD nor EnerNOC shall be liable for any special, indirect, incidental, multiple, punitive, exemplary, or consequential damages, or damages for lost profits or loss or interruption of business, arising out of or in connection with the System or the ESA.</p>
Indemnification	<p>To the fullest extent permitted by law, each Party shall indemnify and defend the other Party from and against any third-party claims, losses, costs, damages, and expenses, attributable to bodily injury or tangible property damage to the extend directly caused by the other Party's negligence, gross negligence, or willful misconduct.</p> <p>Indemnification provisions are provided in full in the ESA.</p>

Binding Terms and Conditions

This Term Sheet signifies ABRSD's intention to work in good faith with EnerNOC to execute an ESA for the Project. Both Parties agree to use commercially reasonable efforts to negotiate the ESA within [90] days of the date of this Term Sheet (the "**Contracting Period**"). ABRSD acknowledges that EnerNOC may incur costs at its sole risk during the Contracting Period, including interconnection studies, in order to ensure achievement of the Target Service Commencement Date. In the event both parties do not execute the ESA for any reason, ABRSD will not be

liable for any costs incurred by EnerNOC during the Contracting Period. ABRSD wishes to express its intent herein to work exclusively with EnerNOC during the Contracting Period. For avoidance of doubt, during the Contracting Period, ABRSD shall not engage in discussions with, nor solicit a proposal from, another party regarding an energy storage project substantially similar to the Project contemplated in this Term Sheet.

The commitments stated in this Term Sheet, and all information and materials shared between ABRSD and EnerNOC shall remain confidential (such information and materials, including this Term Sheet, are the “**Confidential Information**”) during the Contracting Period. Each party agrees as follows: (a) to use the Confidential Information only for the purposes described herein; (b) that each Party will hold in confidence and protect the Confidential Information from dissemination to, and use by, any third party; (c) that neither Party will create any derivative work from Confidential Information disclosed to one Party by the other party; (d) to restrict access to the Confidential Information to personnel, agents, and/or consultants, if any, who have a need to have access for purposes of performing Party’s obligations hereunder and who have been advised of and have agreed in writing to treat such information in accordance with the terms of this letter, and; (e) to return or destroy all Confidential Information of the other Party upon request.

This Term Sheet will be governed by and construed and enforced in accordance with the laws of the Commonwealth of Massachusetts, without giving effect to choice of law rules. All disputes or claims arising out of or relating to this Term Sheet shall be subject to the exclusive jurisdiction of any court located in the Commonwealth of Massachusetts to which the parties irrevocably submit.

IN WITNESS WHEREOF, EnerNOC and ABRSD have caused this Term Sheet to be signed by their duly authorized representatives on the day, month and year written below.

EnerNOC, Inc.

By: _____

Title: _____

Signature: _____

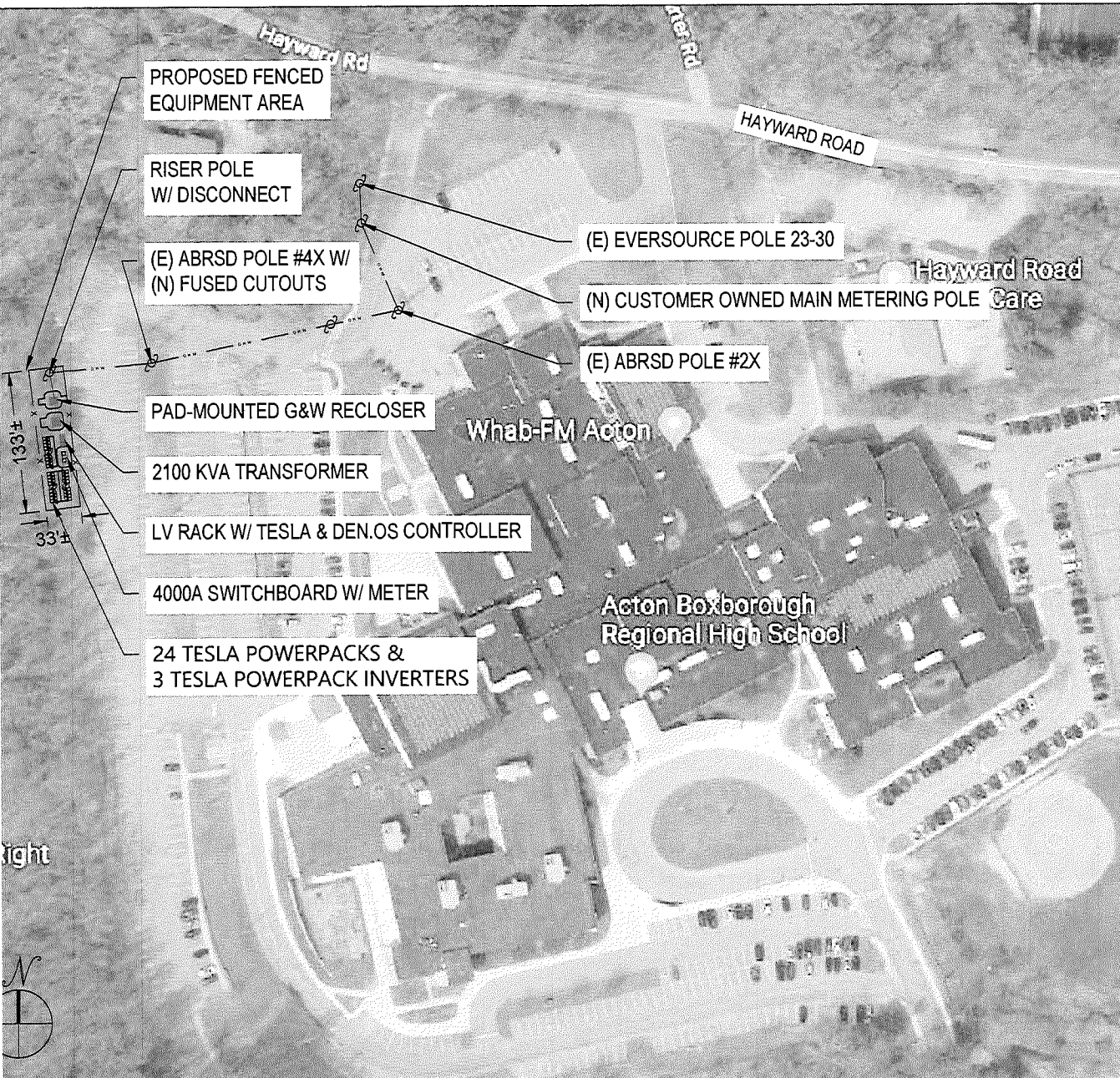
Acton Boxborough Regional School District

By: _____

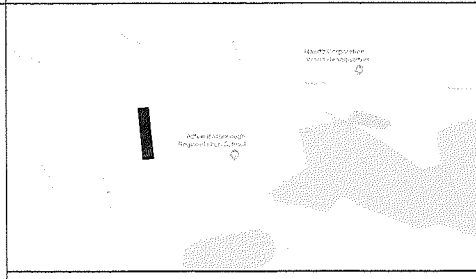
Title: _____

Signature: _____

ACTON BOXBOROUGH REGIONAL SCHOOL DISTRICT - ENERGY STORAGE PROJECT



PROJECT INFORMATION



THIS DOCUMENT IS PROVIDED BY BORREGO SOLAR SYSTEMS TO FACILITATE THE SALE AND INSTALLATION OF A SOLAR POWER SYSTEM FROM BORREGO SOLAR SYSTEMS. THIS IS A PRELIMINARY LAYOUT BASED ON AERIAL IMAGERY. THE ACTUAL PARAMETERS OF THE SYSTEM MAY VARY BASED ON A SITE SPECIFIC SURVEY AND THE COMPLETION OF DUE DILIGENCE EFFORTS. THESE DRAWINGS ARE NOT FOR CONSTRUCTION, REPRODUCTION, RELEASE OR UTILIZATION FOR ANY OTHER PURPOSE. WITHOUT PRIOR WRITTEN CONSENT IS STRICTLY PROHIBITED.

BORREGO SOLAR
 55 TECHNOLOGY DRIVE, SUITE 102
 LOWELL, MA 01851
 PHONE: (888) 898-5273
 FAX: (888) 848-8778
 WWW.BORREGOSOLAR.COM

PROPOSAL SPECIFICATION

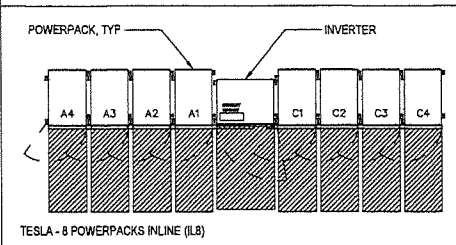
BATTERY SYSTEM SIZE (kWh)	4,176
BATTERY INFORMATION	(24) TESLA 174kWh POWERPACK LITHIUM-ION BATTERY
INVERTER INFORMATION	(3) TESLA 700kVA POWERPACK INVERTER
TRANSFORMER INFORMATION	(1) 2100 KVA
INTERCONNECTION VOLTAGE	13.8kV
	SITE LATITUDE 42.48 N
ASCE7-05 WIND SPEED (MPH)	99
	GROUND SNOW LOAD (PSF) 50

ACTON BOXBOROUGH REGIONAL SCHOOL DISTRICT - ENERGY STORAGE PROJECT
 36 CHARTER RD
 ACTON, MA 01720

PROJECT NUMBER:
 P-SD

REV	DATE	DRAWN	CHECKED	RELEASE LEVEL
1	02/28/17	LS	JD	PROPOSAL LAYOUT

SCALE: 1"=100'
 VALID ONLY WHEN PLOTTED
 ANSI FULL BLEED B 11" X 17"



PV-1
 L1 PROPOSAL LAYOUT

ACTON-BOXBOROUGH REGIONAL SCHOOL COMMITTEE MEETINGS
2018-2019 - DRAFT

Acton-Boxborough Regional School Committee meetings are usually held on the first and third Thursdays of the month, at 7:00 p.m. in the R.J. Grey Junior High School Library.
Materials are posted at <http://www.abschools.org/school-committee/meetings-agendas-packets-and-minutes> usually on the Friday night prior to each meeting. Meeting agendas are posted at least 48 hours prior at www.abschools.org

Annual Workshop: July

Summer Business Meeting: Thursday, August 23

September 6
September 20

October 4
October 18

November 8 1 (*MASC Annual Meeting is Nov 7-9*)
November 15

December 6
December 20

January 10
January 26 (Sat) **School Committee Budget Saturday**
(Preliminary Budget must be prepared at least 20 days prior to final Budget Adoption.)

February 7
February 14 13 **Open Budget Hearing**-required by law
(Final Budget must be adopted not later than 45 days prior to start of Acton Town Meeting, 4/1/19 . 45 days = 2/xx/17)

March 7
March 21
~~March 28 (if needed)~~

April 11
~~April 25~~

May 9
May 23

June 6
June 20

Summer Business Meeting: Thursday, August 22, 2019??

Note: Acton Town Meeting begins April 1, 2019. Boxborough Town Meeting begins May 13, 2019.
DRAFT 4/23/18 <http://www.abschools.org/school-committee>

This proposed version replaces the one on 4/23/18.

9.1.1

DRAFT File: JKF

4/25/18

Discipline of Students with Disabilities

The Individuals with Disabilities Education Act (IDEA), Section 504 of the Rehabilitation Act, and related regulations provide eligible students with certain procedural rights and protections in the context of student discipline.

In general, students with disabilities who violate school rules are subject to removal from their current placement for up to ten (10) consecutive school days to the extent that such a removal would be applied to students without disabilities. ~~Generally~~ This removal can occur without a prior determination of whether the conduct is a manifestation of the student's disability. Students may be removed for additional periods for up to ten (10) consecutive school days in the same school year for separate incidents of misconduct without a manifestation determination, as long as the removal does not constitute a "change in placement" as described below. ~~However, when a student with a disability is excluded from their program for more than ten (10) school days in the school year, the district must provide the student with services to the extent necessary for progress in the general curriculum and/or towards Individualized Education Program (IEP) goals, as determined by the principal in consultation with at least one teacher. (Sentence relocated below.)~~

If the IEP Team, including the parents, determines the behavior was not a direct result of the student's disability, the school may discipline the student according to the school's code of student conduct, except that the district must continue to provide the student with educational services during the period of suspension or expulsion. However, if the Team determines that the behavior was a direct result of the disability, the student may not be excluded from the current educational placement (except in the case of weapons, drugs, or serious bodily injury) until the Team develops and parents/guardians consent to a new Individualized Educational Program (IEP). The Team also must conduct a functional behavioral assessment and develop or revise a behavioral plan for the student as necessary.

A suspension of longer than ten (10) school days or a series of shorter term suspensions that constitute a pattern are considered to represent a change in placement. Whether a pattern exists must be decided on a case-by case basis, considering such factors as the length of each suspension, the nature of the alleged conduct, the proximity of the suspensions to one another, and the total amount of time the student is excluded from school. Prior to a suspension that constitutes a change in placement, the student's Team must meet to determine whether the behavior is a manifestation of the student's disability. In making this determination, the Team must review all relevant information in the student's file, including the IEP, teacher observations, and any relevant information provided by the parents, to determine if the conduct was caused by, or had a direct and substantial relationship to the student's disability or was the direct result of any failure by the school to implement the IEP.

Any student who is removed from school for a disciplinary offense for more than ten (10) consecutive days will have an opportunity to receive educational services and make academic progress during the

period of removal under the school-wide education service plan, and will so be informed at the time of the suspension/expulsion. **When a student with a disability is excluded from their program for more than ten (10) school days in the school year, the district must provide the student with services to the extent necessary for progress in the general curriculum and/or towards Individualized Education Program (IEP) goals, as determined by the principal in consultation with at least one ~~teacher~~ staff person who a member of the student's IEP Team.**

If a principal imposes an out-of-school suspension for a student in preschool or in grades K through 3, the ~~principal~~ **administrator** will send to the superintendent a copy of the written determination and an explanation of the reasons therefore, before the out-of-school suspension takes effect.

In the event a student possesses, uses, sells or solicits a substance or possesses a weapon, or seriously injures an individual at school or a school function, the District may place a student in an interim alternative education setting (IAES) for up to 45 school days. Hearing officers may also order the placement of a student in an appropriate IAES for up to 45 school days upon determination that the current placement is substantially likely to result in injury to the student or others.

When a parent disagrees with the Team's decision on the manifestation determination or with a decision regarding placement, the parent has a right to request an expedited due process hearing with Bureau of Special Education Appeals. Additional information regarding the procedural protections for special education students can be obtained from the Director of Special Education at 978-264-4700, extension 3265.

Discipline of Students Subject to Section 504 of the Rehabilitation Act

Discipline of students with disabilities under Section 504 of the Rehabilitation Act provides students with disabilities certain procedural rights and protections in the context of student discipline. Prior to imposing a "significant change in placement" for disciplinary reasons, the district must determine whether the conduct is a manifestation of the student's disability. A significant change of placement results not only from an exclusion for more than 10 consecutive school days, but also from a pattern of shorter suspensions accumulating to more than 10 schools days during a school year. Whether a pattern exists must be decided on a case-by case basis, considering such factors as the length of each suspension, the nature of the alleged conduct, the proximity of the suspensions to one another, and the total amount of time the student is excluded from school.

Prior to any significant change in placement for disciplinary reasons, a group of individuals **with knowledge** of the student, the evaluation data, and the school program must determine whether the conduct at issue is related to the student's disability. If the conduct is directly related to the disability, the district will not impose the discipline and will develop an individual behavior management plan if the behavior significantly interferes with the student's ability to benefit from his/her education. If the

conduct is not directly related to the student's disability, the district may discipline the student as it does general education students. Additional information regarding the procedural protections for

students eligible for services under laws providing for services for students with disabilities under Section 504 can be obtained from the Assistant Superintendent for Student Services at 978-264-4700, extension 3265.

Discipline of Students Not Yet Determined Eligible for Special Education

The IDEA protections summarized **in this policy for students who are eligible for special education** also apply to students who have not yet been found eligible for IEPs if the school district is deemed to have knowledge that the student was eligible for special education before the conduct that precipitated the disciplinary action occurred.

The IDEA provides that a school district is "deemed to have knowledge" if: (1) the child's parent/guardian had expressed concern in writing to district supervisory or administrative personnel or the child's teacher that the child needs special education and related services; (2) the child's parent/guardian had requested an evaluation of the child to determine eligibility for special education services; or (3) the teacher of the child or other school district personnel had expressed specific concerns about a pattern of behavior by the child directly to the district's director of special education or to other supervisory personnel. However, a school district is not "deemed to have knowledge" if the district evaluated the student and determined that the child was not eligible for special education services or the child's parent refused an evaluation of the child or IDEA services.

If the school district has no knowledge that a student is an eligible student under the IDEA before taking disciplinary measures against the student, the student may be disciplined just as any other student may be. If, however, a request is made for an evaluation to determine eligibility while the student is subject to disciplinary measures, the district must conduct the evaluation in an expedited manner. Pending the results of the evaluation, the student must remain in the educational placement determined by the school authorities, which may include suspension or expulsion without services. If the student is determined eligible for an IEP as a result of the evaluation, the school district must provide the student with special education and related services in accordance with the IDEA.

Additional information regarding the procedural protections for students with special education services can be obtained from the Director of Special Education at 978-264-4700, extension 3265.

- References:** Individuals with Disabilities Education Act (IDEA)
Section 504 of the Rehabilitation Act of 1973
MGL Chapter 71, Section 37H, 37H ½, 37H ¾

MINUTES – DRAFT 3/23/18 First Read 3/15/18

The minutes of a School Committee meeting constitute the written record of committee action and they are the legal evidence of what the action was. Therefore, the Secretary of the School Committee, or a designee, will be responsible for reporting in the minutes all actions taken by the Committee.

Minutes will set forth:

1. A statement on the nature of the meeting (regular, special or executive session);
2. The date, time and place;
3. The members present or absent (annotated as to arrival and departure times if during the meeting);
4. A summary, not a transcript, of the discussions on each subject;
5. A list of documents and other exhibits used at the meeting;
6. The decisions made and the actions taken at each meeting, including the record of the results of all votes (including the names of members moving and seconding each vote).

No vote taken at an open session shall be by secret ballot. Any vote taken at an executive session shall be recorded by roll call and entered into the minutes.

Minutes of all open sessions shall be created and approved in a timely manner. A timely manner is generally considered to be within the next three public body meetings, or 30 days, whichever is later, unless the public body can show good cause for further delay. Copies of the minutes will be sent to all Committee Members with sufficient time to review in advance of the meeting at which such minutes are to be approved.

The approved minutes will become permanent records of the Committee. Minutes of public meetings and minutes of executive sessions that have been released will be in the custody of the Superintendent who will make them available to interested citizens upon request.

LEGAL REFS.: M.G.L. 30A:22; 66:10
Open Meeting Law Regs, 940 CMR 29.11, effective 10/6/17

CROSS REFS.: KDB, Public's Right to Know
 BEC, Executive Sessions

APPROVED: 2/4/16

REMOTE PARTICIPATION

The School Committee recognizes the need for members occasionally to be physically absent from School Committee Meetings and therefore adopts the following policy to govern members' remote participation in School Committee Meetings.

Minimum Requirements for Remote Participation

- (a) A quorum of the School Committee, including the chair or, in the chair's absence, the person authorized to chair the meeting, shall be physically present at the meeting location.
- (b) Members who participate remotely and all persons present at the meeting location shall be clearly audible to each other, as required by M.G.L. c. 30A, section 20(d).
- (c) Members who participate remotely may vote and shall not be deemed absent for the purposes of M.G.L. c. 39, sec. 23D.

Permissible Reasons for Remote Participation

~~The School Committee Chair, or in the chair's absence, the person chairing the meeting, must determine that one or more of the following factors makes the~~ A School Committee member shall be permitted to participate remotely in a meeting, only if's physical attendance would be unreasonably difficult.:

- ~~(a) Personal illness;~~
- ~~(b) Personal disability;~~
- ~~(c) Emergency;~~
- ~~(d) Military service; or~~
- ~~(e) Geographic distance.~~

Technology

- (a) The following media are acceptable methods for remote participation. Remote participation by any other means is not permitted. Accommodations shall be made for any public body member who requires TTY service, video relay service, or other form of adaptive telecommunications.
 - (i) telephone, internet, or satellite enabled audio or video conferencing,
 - (ii) any other technology that enables the remote participant and all persons present at the meeting location to be clearly audible to one another.
- (b) When video technology is in use, the remote participant shall be clearly visible to all persons present in the meeting location.
- (c) The School Committee Member who is absent from the Meeting will notify the District Administration with as much advance notice as possible and will work with the District Administration to establish the appropriate technology to effect the School Committee Member's remote participation.
- (d) The chair or, in the chair's absence, the person chairing the meeting, may decide how to address technical difficulties that arise as a result of utilizing

remote participation, but is encouraged, wherever possible, to suspend discussion while reasonable efforts are made to correct any problem that interferes with a remote participant's ability to hear or be heard clearly by all persons present at the meeting location. If technical difficulties result in a remote participant being disconnected from the meeting, that fact and the time at which the disconnection occurred shall be noted in the meeting minutes.

(e) The costs attributable to equipment or service relating to the District's ability to communicate with the remote participant will be born by the District. The personal costs of the participant attributable to equipment or service relating to the remote participant's ability to communicate with the District will be born by the participant. If the costs associated with remote participation become prohibitive, the School Committee will reevaluate its policy on remote participation.

Procedures for Remote Participation

(a) Any member of the School Committee who wishes to participate remotely shall, as soon as reasonably possible prior to a meeting, notify the chair or, in the chair's absence, the person chairing the meeting, of his or her desire to do so and the reason for and facts supporting his or her request.

(b) At the start of the meeting, the chair shall announce the name of any member who will be participating remotely ~~and the reason under 940 CMR 29.10(5) for his or her remote participation.~~ This information shall also be recorded in the meeting minutes.

(c) All votes taken during any meeting in which a member participates remotely shall be by roll call vote.

(d) A member participating remotely may participate in an executive session, but shall state at the start of any such session that no other person is present and/or able to hear the discussion at the remote location, unless presence of that person is approved by a simple majority vote of the public body.

(e) When feasible, the chair or, in the chair's absence, the person chairing the meeting, shall distribute to remote participants, in advance of the meeting, copies of any documents or exhibits that he or she reasonably anticipates will be used during the meeting. If used during the meeting, such documents shall be part of the official record of the meeting, and shall be listed in the meeting minutes and retained in accordance with M.G.L. c. 30A, sec. 22.

LEGAL REFERENCES: M.G.L. c. 30A, sec. 25 (a) and (b), MASS 940 CMR 29.00

Approved 3/22/12 and 6/25/15

Educational Research in the Acton-Boxborough Regional School District

New
9.1.4

Policy - DRAFT

First Read
4/12/18

While the Acton-Boxborough Regional School District (ABRSD) recognizes the importance of research and its contributions to teaching and learning, the purpose of the ABRSD is to educate children.

Therefore, the district will only approve an outside request of an agency, institution or individual to:

- conduct any research,
- administer surveys or questionnaires,
- obtain information from students and staff, or
- gather any data for research purposes

if that request is aligned to district interests and/or priorities, and will assist the District in achieving its mission, vision and/or goals. Proposals must demonstrate they can be of benefit to the District without unduly taking away from instructional time and ABRSD resources.

All requests must be submitted in writing and coordinated through the office of the Assistant Superintendent for Teaching and Learning.

Parents shall have the opportunity to review, upon request, a survey created by a third party before the survey is administered or distributed to a student. Parents shall also have the opportunity to opt their child(ren) out of participation in any survey, analysis, or evaluation. Students who are 18 years or older may opt out of such surveys, analyses, or evaluations.

Educational Research in the Acton-Boxborough Regional School District

Procedures- DRAFT

The following procedures must be followed by persons requesting the use of facilities or students in the Acton-Boxborough Regional School District for research purposes.

1. A letter formally requesting permission to conduct research, surveys or questionnaires, obtain information from students and staff, or gather any data for research purposes must be sent to the Assistant Superintendent for Teaching and Learning by the principal investigator. It must include:
 - a. Names and duties of all persons involved in the research, including contact information for the Institutional Review Board
 - b. Research goals
 - c. Relevance of the research to the Acton-Boxborough Regional School District
2. The attached form must also be completed and returned to the Assistant Superintendent for Teaching and Learning.
3. The request will be evaluated according to the following:
 - a. The study provides information that will be relevant to district/school leaders and/or educators
 - b. There are the assurances for student, educator and school/district anonymity
 - c. The research design technically sound
 - d. The impact on the school/district routine and resources is clear
4. Express written active consent of all research participants or the parents/guardians (if student is younger than 18 years of age) is required. Original consent forms must be kept on file by the researcher. Copies should be given to the Assistant Superintendent for Teaching and Learning. Consent forms should be translated to language indicated by parent and include:
 - a. Purpose and procedures including any possible risks
 - b. Types of activities in which students will engage, amount of time, start and end dates
 - c. Description of data collected and how information will be kept confidential
 - d. Identification of all individuals responsible for the research, including institutional affiliation, address and contact information.
5. Remuneration for research participation by MA public employees are limited to cash or gifts of no more than \$50. Students may not be given any remuneration.
6. The researcher agrees to send a written report of the findings to the Principal(s) of the school(s) involved and to the Assistant Superintendent for Teaching and Learning.

FIRST AID

The District strives to provide a safe environment. If an accident or sudden illness occurs, school personnel will administer first aid and, if warranted, call emergency medical services.

First aid is defined as the care given to a student experiencing a sudden illness or injury with the intention to save a life, to prevent the worsening of the condition, or to promote recovery.

It does not include diagnosis or treatment.

First aid procedures will be in accordance with current best practice and will incorporate the following requirements:

1. The school nurse or another trained person will be responsible for administering first aid.
2. When an illness or an injury is serious, staff will call emergency medical services (EMS) first. Every effort will be made to contact the parent/guardian as soon as possible after calling EMS.
3. No young child who is ill or injured will be sent home alone at the end of the school day nor will any older child unless the illness or injury is minor. A young child who is ill or injured will not be sent home unless it is known that someone is there to receive them.
4. The school nurse, administrator, or staff member in charge shall completed an accident report form when a student is injured in school or at a school-sponsored event.
5. Accident report forms are kept in each school health office and incidents are entered into the student's health record.

Automated External Defibrillators

Automated external defibrillators (AEDs) are placed in each school for use by designated personnel who have been trained in the use of AEDs. The Superintendent or Nurse Leader shall develop guidelines for employees regarding the use of these devices and shall ensure that employees received training on their proper use and handling. The guidelines shall also specify the placement, security and maintenance as well as recommended us of the AED.

The authorization of AEDs in the District's schools shall not be deemed to create a guarantee or obligation to use the AED in the case of an emergency, nor any expectation that an AED or trained employee will be present and/or able to use an AED in an emergency or any expectation that the AED will operated properly.

REFERENCES: MGL 71:55A and 71:56
ABRSC Policy JLC, Student Health Services and Requirements

Approved: TBD (Spring 2018)

ACTON-BOXBOROUGH REGIONAL SCHOOL COMMITTEE (ABRSC) MEETING
(Pre Acton Annual Town Meeting)
DRAFT Minutes

Room #102 East
Acton-Boxborough Regional High School

April 2, 2018
6:00 p.m. Executive Session
6:20 p.m. (approximately) Open Meeting

Members Present: Diane Baum, Brigid Bieber, Mary Brolin, Dennis Bruce, Amy Krishnamurthy, Tessa McKinley, Maya Minkin, Paul Murphy, Deanne O’Sullivan

Members Absent: Kathleen Neville, Eileen Zhang

Others: Peter Light (open meeting only), Bill McAlduff, Beth Petr

1. The ABRSC was called to order at 6:07 p.m. by Chairperson Amy Krishnamurthy. Dennis Bruce was thanked for serving on the Committee during the past year.

2. EXECUTIVE SESSION

Amy Krishnamurthy moved that an executive session be convened under M.G.L. Chapter 30A, §21(a)(2) to conduct strategy sessions in preparation for negotiations with nonunion personnel or to conduct collective bargaining sessions or contract negotiations with nonunion personnel. She stated that an open meeting may have a detrimental effect on the bargaining position of the Board and that they would return to open meeting at approximately 6:20 p.m. Mary Brolin seconded.

The Committee voted by roll call: YES: Baum, Bieber, Brolin, Bruce, Krishnamurthy, McKinley, Minkin, Murphy, O’Sullivan

The ABRSC returned to OPEN MEETING at 6:20 p.m.

3. Possible **VOTE** to Approve the Superintendent Contract Between Peter Light and the ABRSD – *Amy Krishnamurthy*

Brigid Bieber moved, Paul Murphy seconded and it was unanimously, **VOTED** by roll call to approve the Superintendent contract between Peter Light and the ABRSC (YES: Baum, Bieber, Brolin, Bruce, Krishnamurthy, McKinley, Minkin, Murphy, O’Sullivan)

4. Town Meeting Presentation by the Committee

a. Approval of Statement from the Regional Financial Oversight Committee (RFOC) – **VOTE**

Mary Brolin updated the Committee on the recent meeting of the RFOC and the statement they proposed to read at the two Town Meetings.

Brigid Bieber moved, Paul Murphy seconded and it was unanimously,

VOTED: to approve the statement from the RFOC

The Committee will be asked to disband the RFOC at the meeting on 4/12/18.

5. Proposed Legislative Communication from the Committee

a. Approval of Letter regarding Gun Violence and Regulations - **VOTE** – *Paul Murphy*

Paul Murphy reviewed several edits to the proposed letter with the Committee.

Brigid Bieber moved, Deanne O’Sullivan seconded and it was unanimously,

VOTED: to approve the “Taking Action to Prevent Further Gun Violence” letter as proposed. Members all signed and Beth Petr will distribute it to the appropriate people.

6. Approval of Minutes

Mary Brolin moved, Brigid Bieber seconded and it was unanimously,

VOTED: to approve the minutes of the ABRSC meetings on March 12, 2018 (as amended) and March 15, 2018.

The ABRSC adjourned at 6:30 p.m.

Respectfully submitted,
Beth Petr

List of Documents Used:

See agenda, ABRSD Superintendent’s Contract of Employment between ABRSC and Peter Light as of July 1, 2018

ACTON-BOXBOROUGH REGIONAL SCHOOL COMMITTEE (ABRSC) MEETING
DRAFT MINUTES

Library
R.J. Grey Junior High School

April 12, 2018
7:00 p.m. Open Meeting
7:30 p.m. FY19 School Choice Program Participation Hearing
7:40 p.m. (approximately) Return to Open Business

Members Present:	Diane Baum, Brigid Bieber, Mary Brolin, Ginny Kremer, Amy Krishnamurthy, Tessa McKinley, Maya Minkin, Kathleen Neville (7:10 p.m.), Angie Tso, Eileen Zhang
Members Absent:	Paul Murphy
Others:	Marie Altieri, Deborah Bookis, Dawn Bentley, Bill McAlduff, Beth Petr, Dave Verdolino

1. The ABRSC was called to order at 7:00 p.m. by Chairperson Amy Krishnamurthy.
2. **Chairman’s Introduction – Amy Krishnamurthy**
 - 2.1. Annual Spring Town Elections
 - Welcome to new Acton School Committee Reps: Angie Tso and Ginny Kremer
 - Boxborough Election will be on May 22
3. **Public Participation -**
Corrine Hogseth spoke from the audience advocating for a better contingency plan for next year if there are many snow days, as has happened this year and avoid having school the last week of June.
4. **Conant School Presentation – Damian Sugrue, Principal**
Mr. Sugrue focused on the literacy work being done at Conant including their monthly themes and activities in kindergarten, Grade 2 and Grade 6. Brigid Bieber thanked him for the Book Buddies program and how valuable it is to all students.
5. **The School Choice Program PUBLIC HEARING** was called to order at 7:30 p.m. by Amy Krishnamurthy.

FY'19 ABRSD MA DESE School Choice Program Participation Memo
Marie Altieri explained that because the district does not have space to take new choice students, she revised the motion to recommend voting NOT to participate in the School Choice program for next year. She explained that there was one sibling of a current choice student who may have been planning to go to kindergarten in September, but she was now informed that the child will wait one year. At this time, we believe there will be 2 siblings who will request acceptance in September 2019.
6. **The motion to adjourn the PUBLIC HEARING** was made at 7:32 p.m. by Mary Brolin, seconded by Katie Neville and unanimously approved.
7. **FY'19 ABRSD MA DESE School Choice Program Participation - VOTE – Marie Altieri**
Brigid Bieber moved that the ABRSC not accept any School Choice students for the school year beginning September 2018. The motion was seconded by Katie Neville.

Bill McAlduff suggested a friendly amendment to the motion to read, "The ABRSC moves to not participate in the school choice program for the 2018-2019 school year."

Brigid Bieber accepted the amendment and Katie Neville seconded it.

The School Committee unanimously,

VOTED and approved the amended motion.

8. **ABRSD School Calendars** – *Bill McAlduff*

8.1. FY19 – Reformatted & Addition of Jr High/High School Early Dismissal Days

8.2. FY18 – Superintendent's Memo re last day of school on June 27, 2018

Bill McAlduff reviewed the slight changes to the voted calendar. The Junior High early release days and MCAS late starts have been added. The month of June was also reformatted to show the full month and be clearer about what can happen if many snow days are used, as has been the case this year. Snow days prior to April 1 must be made up. After that, if 5 days have been used, they do not have to be made up. (See memo)

The Westford School Calendar was provided on the table as an example of how additional religious holidays could be shown (although not as no school days). It was noted that Westford's version is two pages, compared to our one page. Mr. McAlduff also provided information regarding Alternative Student Learning/ Distance Learning used by Westford as another idea. The Committee discussed the memo from Mr. McAlduff in the packet.

It was agreed that, as recommended by the Superintendent, the days for this year would be made up by extending the school year to June 27, 2018.

In response to a question, Mr. McAlduff said that two people responded to his recent memo to families alerting him to what other communities were doing and one family shared that they were in support of his position. He spoke about the difficulty of adding a number of minutes to each day as a way to make up days, as well as the contracts' restrictions. Marie Altieri clarified that there is language in the contracts requiring the April and February vacations and the holidays. A side letter or revision in language in the next negotiations round would be needed for these types of changes.

The Committee asked about surveying families and staff again. Marie said that the last time surveys were done in the Fall of 2016, 77% of staff wanted to keep the vacation schedules. Families were split 50-50. Mary Brolin suggested that they consider making Good Friday an early dismissal day.

Several members liked the format change and wanted no changes for this year. In the future having a program in place that could be utilized if needed (if many snow days) would be valuable. A comment was made that alternative learning can be great but it has to fit in with what teachers want the students to be learning. The Committee's decisions cannot add more work for staff. Alternative Learning also has consider all kinds of learners. Tessa McKinley stressed that continuity of learning is essential and this must be taken into account next time the calendar holidays are discussed due to our increased diversity. Eileen Zhang liked our clear calendar, but found the signs and shapes used by Westford very visual and helpful. They may be better than using colors.

Given the possible interest in Alternative Learning, Mr. McAlduff suggested that the first step be a discussion with the Senior Leadership Team (SLT) and some research (see Jan 5 DESE memo). Following that, a discussion with the ABEA at one of their monthly

meetings in June or so would be important. He felt that this could possibly be an initiative for the early part of next fall.

Mr. McAlduff commented that combining the February and April vacations into one has been an idea for many years across the state. Everywhere he has worked, it has come up but never moved forward. One of the big issues is that a vast majority of staff has school age children and live outside of the district that they work, so their schedules would be out of synch. He doesn't think combining the two weeks is a realistic option until this is taken up by the DESE and it becomes a statewide practice. That is how it has been successful in other states.

Ginny Kremer stated that public participation is asking for a shorter vacation in February or April, not the full week. She asked if that could be discussed. Marie Altieri responded that it was a good collaborative conversation with the unions but only if the state takes it up would they really support it.

The Committee agreed to continue the discussion regarding Good Friday at a future meeting.

9. Superintendent Memo

9.1. Response to Parents' Request for Review of Cul-de-Sac Bus Service

The Superintendent referred to the memo sent to the Committee yesterday in response to some families' concerns. He does not believe that a safety assessment is necessary and it should not be done right now given that we are moving to elementary level single tier bussing. He shared a Guide done by the National Center for Safe Routes to School and NHTSA. JD Head will go through this information with staff as they plan the routes next year. He recommends no further action.

Mr. McAlduff said that the policy subcommittee might review the transportation policies related to the Guide and see if it makes sense to include reference to it anywhere.

Parent Jay Simon spoke from the audience. He lives on the road near Strawberry Hill in question. When the changes were made, he contacted the Transportation Office and was frustrated that he got no response for a long time. The parents used this guide when speaking with the Superintendent at their meeting. There are many children involved in this issue and he stated that, "Care must be taken not to place a higher priority over safety for efficiency." He emphasized that the guide includes all of his points.

In response to questions from the Committee about next steps, Mr. McAlduff suggested that the Committee read the guide first and create a list of specific questions. Brigid Bieber asked that when the single tier bussing routes are looked at this information is considered. Mary Brolin noted in reading the article that it talks about the bus backing up near children. If it backs up in this cul de sac, maybe it should be reconsidered.

The policy subcommittee will review these policies and corresponding procedures and report back to the School Committee.

10. Recommendation to Approve ABRSD Purchase Cards (P-card) – VOTE – Dave Verdolino

Clare Jeannotte and Glenn Brand discussed this possibility over the past few years and Dave Verdolino feels like it is appropriate at this time for our district. The budget subcommittee talked about it several times, and felt that it gives the district much more control over spending compared to reimbursing staff. Dave explained that once the Committee votes to

approve, other procedures will be developed. No cards will be issued for purchasing until all the controls and procedures are in place. There is no cost to the district.

When asked if other options like Paypal or Amazon were considered, Dave said that the district has an account with Amazon but it is not universally accepted. Currently staff has to front money for a conference on their personal credit card and then be reimbursed. Mary Brolin stated that Brandeis uses these P-Cards and they work very well.

Diane Baum moved, Angie Tso seconded and it was unanimously,

VOTED: to approve the implementation of the AB Procurement Cards.

11. School Building Committee Update –

Mary Brolin did this update out of order, before the Choice Hearing.

Mary Brolin will ask the School Committee to vote new members of the School Building Committee in the future, including new Superintendent Peter Light as of July 1, and possibly 2 or 3 others who she is communicating with.

11.1. Building Committee Meeting on 3/22/18

11.2. Owner’s Project Manager (OPM) Review Subcommittee Meeting on 3/27/18

12. Town Meeting Updates

12.1. Acton’s meeting began April 2

12.1.1. Presentation Slides

12.2. Boxborough’s meeting begins May 14

13. Kindergarten Registration Update

Marie Altieri did this update out of order, before the Choice Hearing.

Marie reported that the lottery was done last month placing 309 children in kindergarten. 313 were projected. Only Blanchard had a lottery. Families who chose any of the 5 Acton schools got their first choice. There is a wait list of 15 Acton families requesting Blanchard right now. There is significant interest in All Day Kindergarten. The joint PTO co-chairs had many questions about hybrid classes. Marie explained this history in her memo. Over the years the district has decided not to do hybrids unless required, because it has turned into somewhat of an equity question.

14. DRAFT 2018-2019 School Committee Meeting Calendar – Amy Krishnamurthy

The Committee briefly discussed the proposed dates. There was agreement not to conflict with the MASC November meeting. Beth will confirm.

15. Subcommittee Reports

15.1. Policy

15.1.1. Discipline of Students with Disabilities, File: JKF – Second Read – **VOTE** -
Dawn Bentley

Dawn Bentley reported that this policy needed to be revised following advice resulting from the District’s Coordinated Program Review. She had made a revision since the posting removing language in the draft policy referring to preschoolers because it is not required in the law.

Amanda Bailey spoke as the Chair of the ABSpedPAC. She stated that if the district sends a student home early, it is considered a suspension, so maybe that should be included in the policy. She requested that “ECC” be added in addition to the principal. The Committee discussed these points and agreed to vote at their next meeting.

- 15.1.2. Minutes, File: BEDG – First Read
- 15.1.3. Remote Participation, File: BEDJA – First Read
- 15.1.4. Research Requests from Outside the District, File: NEW – First Read – *D.Books*

Comments should go to any member of the policy subcommittee. Mary Brolin commented that more than just the secretary should be included in the Minutes policy.

15.2. **Regional Financial Oversight Committee (RFOC)**

- 15.2.1. Minutes of meeting on 3/27/18
- 15.2.2. Recommendation to Dissolve – **VOTE** – *Mary Brolin*
Mary Brolin reported that at their last meeting, there was a recommendation that the committee be dissolved and it was unanimously approved. She referred to the Regional Agreement where it talks about this in appendix A. They feel the public isn't as concerned about this as much now, as the numbers have come closer together and it's not worth the significant time to continue to do the calculations.

Tessa McKinley moved, Brigid Bieber seconded and it was unanimously,
VOTED: to dissolve the Regional Financial Oversight Committee.

16. **School Committee Member Reports (oral)**

- 16.1. Diane Baum reported on her inspiring visit to Minuteman Tech where they laid the top beam of their new building.
- 16.2. Angie Tso asked if the Regional Agreement would be reviewed next year. Amy Krishnamurthy said that the Committee can decide if we want it looked at next year.

17. **Consent Agenda – VOTE**

- 17.1. **Statement of Warrants & Approval of Minutes (minutes next meeting)**
- 17.2. **Donations to our Schools – Bill McAlduff**
 - 17.2.1. Cynthia J.McCarthy and Daniel McCarthy Memorial Fund grant of \$900 to the ABRHS Envirothon Student Activity Club
 - 17.2.2. Boxborough Community Center donation of a piano valued at \$2,500 plus \$1,000 endowment for tuning each year to the Blanchard Memorial School
 - 17.2.3. Blanchard Parents/Teachers/Friends Organization Grant of \$1,096.53 for OT Supplies

Mary Brolin moved, Tessa McKinley seconded and it was unanimously,
VOTED: to approve the consent agenda as proposed.

18. **FYI**

The ABRSC adjourned at 9:05 p.m.

Respectfully submitted,

Beth Petr

List of Documents Used: See agenda

Next Meetings:

April 26 - ABRSC at 7:00 p.m. in the R.J.Grey Junior High Library

May 14 - Boxborough Town Meeting begins

May 17 - ABRSC at 7:00 p.m. in the R.J.Grey Junior High Library

May 21 – Boxborough Elections



Acton-Boxborough Travel Basketball Program
 P. O. Box 2795
 Acton, Massachusetts 01720

April 12, 2018

Members of the School Committee:

The Board of Directors of the Acton-Boxborough Travel Basketball Program would like to donate and install four new glass backboards (including padding) and rims on the side baskets at the High School Lower Gym. As part of our operating philosophy, we make every attempt possible to reinvest proceeds into the community to improve the basketball experience for town residents of all ages and levels. Among projects we have partially or fully funded are the Elm Street outdoor courts, glass backboards on the main court at the HS Lower Gym and side courts at the Jr. High, scoreboard replacement in the Jr. High gym, and donations to the HS basketball boosters program.

This would be identical to the project we did at the Jr. High last summer.

Having spoken to basketball enthusiasts of all levels in the community, we can speak unequivocally that this upgrade is something that people have wanted to see happen for some time.

Ideally this project would be completed early this summer when school is not in session. We have secured a vendor who can supply the equipment and a different company who is able to handle the installation. The approximate total value of this donation including installation costs is \$5500.

Kind regards –
 Josh Hammer

Donald F. Biggs
Co-President

David M. Poplyk
Co-President

Robert A. Jackson
First Vice President

Benjamin S. Smith
Second Vice President

Sean P. O'Sullivan
Second Vice President

Joshua P. Hammer
Executive Director

Joseph C. McDonald, Jr.
General Director

Joseph E. O'Brien
General Director

Mark L. Scheier
General Counsel

Acton-Boxborough Regional School District
Acton-Boxborough Regional High School

OVERNIGHT, INTERNATIONAL and/or OUT-OF-STATE FIELD TRIP REQUEST
(Submit for Superintendent and School Committee approval)

- The first step in this process is to meet with department leader and Dean to go over initial planning details.
- Please file request form at least 4 weeks in advance of 1-3 day trips.
- Please file request form at least 3 months in advance of advance trips longer than 3 days and/or trips with per student cost greater than \$500.
- Please attach an itinerary, if available.

Please TYPE or use COMPUTER FORM

Name of teacher(s): *Karin Drowne (lead chaperone), Mary Price Maddox, Brian Dempsey, Meredith Morgan*

of students going: *Hopefully 25-30* # of chaperones (gender(s)): *3 women, 1 man*

Names of chaperones: See above.

Date(s) of trip: *April vacation 2019* School time involved: *potentially half day the Friday before vacation begins.*

Purpose of trip/destination and connection to curriculum (if applicable): *Trip will be organized through ACIS and will travel to Greece and to Italy. (see attached for details about the trip)*

Have you taken this trip before? *I have travelled with ACIS 4 times, and I have done a trip very similar to this one (this trip spends one less day in Athens, otherwise the same trip)*

Are there any special arrangements required (such as extra insurance, ADA accommodations)? If so, explain. *Not applicable*

Cost per Student: (Please describe how the cost is determined.): *Depending on when students sign up around \$4000.*

Who will pay for the trip? *students and families*

Has any fundraising been done? *No* If so, please describe?

Are any parents driving? *None (we will take a bus all together to and from the airport on departure and arrival.)* If so, have appropriate insurance forms been filled out?

Have you followed the procedure outlined in Policy IJOA? (See ABRSD School Committee Policies.)

Other comments:

Enthusiastically Approved Not Approved

Department Leader: *[Signature]* Date: 3/28/18

Approved Not Approved

Dean of Students: *[Signature]* Date: 4/6/18

Approved Not Approved

Principal: *[Signature]* Date: 4/6/18

Approved Not Approved

Superintendent: *[Signature]* Date: 4/11/18

Approved Not Approved

School Committee: _____ Date: _____

Greeks and Romans

Apr 12 - Apr 19, 2019

Group Leader:

Karlin Drowne

Group ID:

21753

Depart From:

Boston

acis

what's included



Round-Trip Flights



Daily Breakfast and Dinner
(unless otherwise noted)



Centrally Located Hotels



24-Hour Tour Manager

- ✓ Expert Local Guide Throughout Greece
- ✓ Athens Tour with Guide
- ✓ Acropolis and Parthenon
- ✓ Acropolis Museum
- ✓ Greek Cultural Evening
- ✓ Greek Dancing Lesson and Show
- ✓ Ancient Delphi Site and Museum with Guide
- ✓ Pompeii Tour with Guide and Personal Headsets
- ✓ Rome Tour with Guide and Personal Headsets
- ✓ Vatican Museums with Reservation
- ✓ St. Peter's Basilica
- ✓ Colosseum with Guide and Reservation

our promise

In educational travel, every moment matters. Pushing the experience from "good enough" to exceptional is what we do every day. Our mission is to empower educators to introduce their students to the world beyond the classroom and inspire the next generation of global citizens. *Travel changes lives.*

cultural connections



HIGHLIGHTS waiting to happen

Greek Cultural Evening and Dance Lesson

Greek heritage comes to life with an authentic evening of cultural lessons, dance performances and instruction, traditional cuisine and plate breaking!

"Our tour guide was phenomenal; he went above and beyond my expectations. His knowledge of the area and the history behind it was most impressive."

Matthew L. Participant



trip itinerary - 8 days

Apr 12, 2019: Overnight Flight

Depart from the USA.

Apr 13, 2019: Athens

Welcome to Athens. Meet your ACIS Tour Manager and begin to explore the bustling Plaka. (D)

Apr 14, 2019: Athens

Greet the day with a guided sightseeing tour that reveals the glories of ancient Greece. Ascend to the top of the Acropolis and visit the iconic Parthenon, which dominates the city and stands as a powerful and impressive memorial to the remarkable civilization that built it. Then view the Agora, followed by a stroll through the Acropolis Museum, a modern architectural jewel. The afternoon is yours to explore more at your own pace. Tonight you'll be thoroughly entertained by a Greek cultural evening in a traditional village setting. Taste freshly pressed olive oil, watch a tzatziki making demonstration, dine on authentic taverna cuisine and feast your eyes and ears on professional dancers moving to the traditional music. An expert also teaches you the steps of traditional Greek dances so that you can join in the fun! (B,D)

Apr 15, 2019: Overnight Ferry

Today drive to mystical Delphi, home to the great oracle of Apollo. Explore the Archaeological Museum of Delphi and visit the Temple of Apollo, whose ruins date from the 4th century BC. Then continue to Patras to board your overnight ferry. (B,D)

Apr 16, 2019: Sorrento

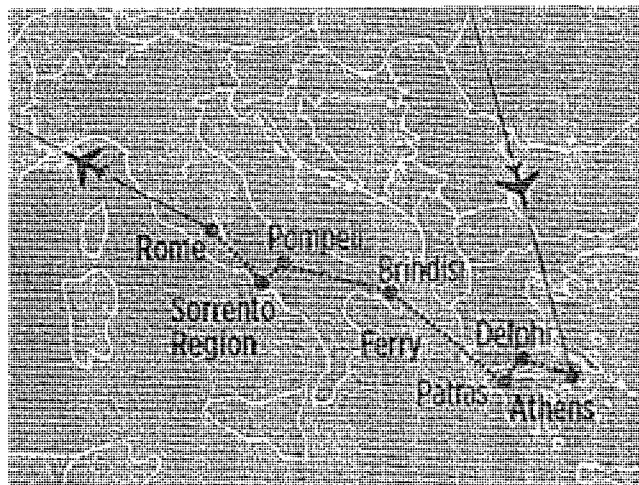
Awaken amidst the waters of the Mediterranean as you cruise toward Italy. Land and travel through the olive groves of the southern region to Pompeii. With a local guide giving commentary via personal headsets, explore the ancient city left perfectly preserved after Mount Vesuvius' eruption engulfed it in ash in 79 AD. Then continue to the stunning Sorrento region for the night. (B,D)

Apr 17, 2019: Rome

Drive north to Rome this morning and immerse yourself in a city rich in history and culture as you begin to explore its fountains, Baroque façades and charming piazzas. After dinner join your tour manager for a stroll through the lively Piazza Navona and to gaze up at the magnificent Pantheon, at once an ancient temple and functioning Roman Catholic Church. (B,D)

Apr 18, 2019: Rome

Rome is called "The Eternal City" because the ancient Romans believed that no matter what empires rose and fell, Rome would endure forever. Today's panoramic drive of the city is a great introduction to the many phases of Roman history. Our local expert accompanies you through the Vatican Museums, including the Sistine Chapel, and St. Peter's Basilica, giving commentary via personal headsets. The best part is that these are timed entrances, meaning you'll breeze right by the long lines facing other tourists. Then go inside the iconic and historic Colosseum with a local guide



(another line-avoiding timed reservation) and learn the many stories of this nearly 2,000-year-old Roman landmark that's considered one of the architectural wonders of the ancient world. (B,D)

Apr 19, 2019: Departure

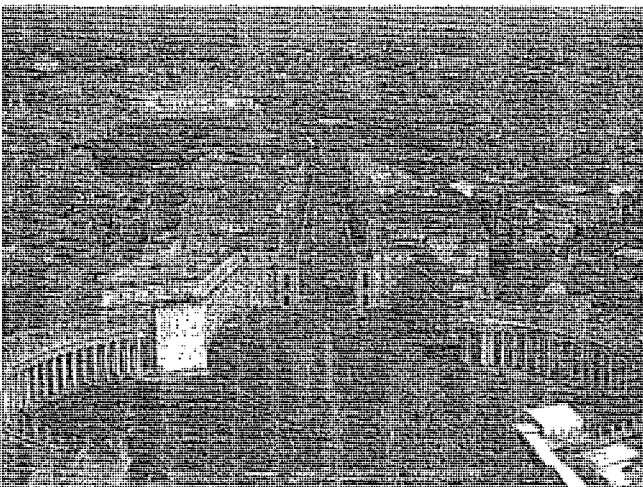
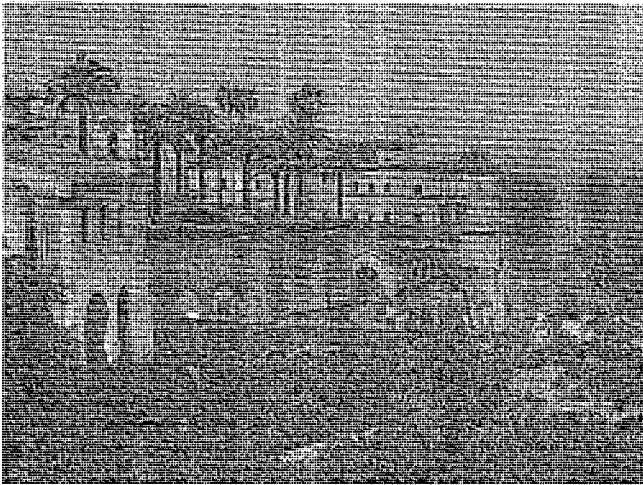
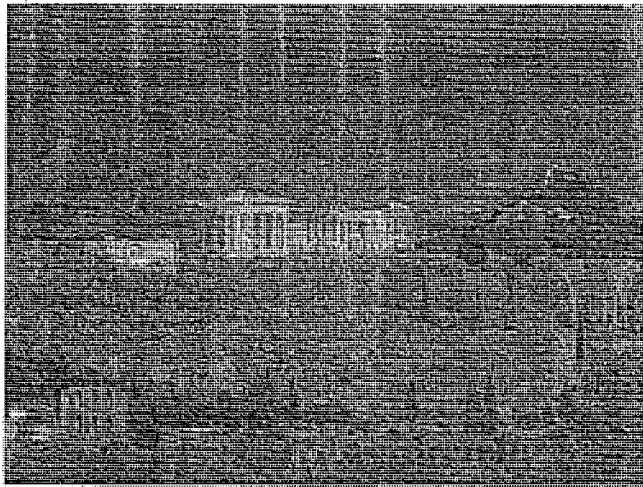
Depart for the USA.

Optional Extensions and Extra Nights:

Further immerse yourself in the culture and wonders of la dolce vita with an extra night in Rome, including the services of your ACIS Tour Manager. (B)

This is a preliminary itinerary for your group.





learning objectives

1. Students will come to understand the exchange of knowledge and expertise between the Greek and Roman worlds, from art and politics to social organization.
2. Students will gain a sense for the Golden Age of Ancient Greece and the role of mythology in Greek life.
3. Students will gain a better understanding of the history and current governance of the Catholic religion by visiting the Vatican City and St. Peter's Basilica.

tour cost

Participant Fees

Program Fee	\$4081
Early Registration Discount	\$-300
Weekend Surcharge	\$80

Total Participant Fees² \$3861

² Valid through 05/01/18 with \$200 deposit.

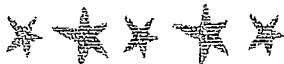
Additional Fees (as applicable)

Adult Surcharge	\$95
Single Room Supplement	\$510
Double Room Supplement	\$260
Ultimate Protection Plan	\$240
Comprehensive Protection Plan	\$200
Half-day Excursion to Capri	\$81

notes from acis

- Save \$50 off your Total Participant Fees if you pay for your trip by E-Check or through our Automatic Payments Plan.
- All registered participants can enjoy the convenience, security and savings of having payments automatically withdrawn from a checking account by enrolling in an Automatic Payments plan. To learn more, visit www.acis.com/autopay
- Adult travelers age 24 and older should add in the Adult Surcharge and Double or Single Room Supplement to calculate their Total Participant Fees.
- This educational travel program is not school or district sponsored unless expressly stated by the Group Leader.

The Most Recommended
Educational Travel Company!





Don't just take our word for it! Read reviews online at
acis.com/EXC



2017-2018 ABRSD Family Learning Series

Building Resilience: Mindset, Mindfulness & Movement

For parents/caregivers and community members





BENSON-HENRY INSTITUTE

Resilient Schools: Helping School Communities Manage Stress and Learn Lifelong Resiliency Skills

Rana Chudnofsky, Ed.M.

9.12.17 ABRHS Auditorium 7-8:30PM





Robert Evans, Ed.D.

Executive Director
The Human Relations Service
Wellesley, MA

Raising Resilient Children in Challenging Times

Robert Evans, Ed.D


10.11.17 JH Auditorium 7-8:30 PM

What Parents and Caregivers Can Do to Nurture Lifetime Readers

Steven Layne, Ed.D

11.7.17 ABRHS Auditorium 7-8:30 PM




REBOUND: The Chris Herren Story
A story about

Chris Herren

REBOUND: The Chris Herren Story

Chris Herren

11.20.17 ABRHS Auditorium 7-8:30 PM





BECOMING THE MATH TEACHER YOU WISH YOU'D HAD

Mathematics and Mindset

Tracy Johnston Zager


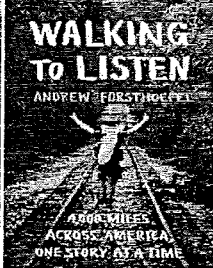
12.14.17 ABRHS Auditorium 7-8:30 PM

Attunement & Somatic Regulation: A Body Based Approach Toward Increasing Understanding & Resilience

Heather Finn, LICSW

2.6.18 ABRHS Auditorium 7-8:30 PM

WALKING TO LISTEN
ANDREW FORSTHOEFEL


4000 MILES ACROSS AMERICA ONE STORY AT A TIME

The Missing Medicine: Listening as a Practice in Healing & Transformation

Andrew Forsthoefel

Students grades 9-12 welcome to attend

5.16.18 JH Auditorium 7-8:30 PM





DR. ANTHONY RAO

Movement

Anthony Rao, PhD

4.10.18 ABRHS Auditorium 7-8:30 PM

Perfectionism

Lisa Coyne, PhD

May TBD ABRHS Auditorium 7-8:30 PM
Students grades 6-12 welcome to attend

5-16-18

Supported by the ABRSD, ABRSD PTOs, PTF, and PTSOs, AB Special Education Parent Advisory Council, Danny's Place Youth Services, and AB United Way

Please visit <http://www.abschools.org/families/family-learning> for more information and to confirm locations.