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APR 11 2012

TOWN CLERK

TOWN OF MEDWAY
Planning & Economic Development Board
155 Village Street
Medway, Massachusetts 02053

Andy Rodenhiser, Chairman
Robert K. Tucker, Vice-Chairman
Thomas A. Gay, Clerk
Cranston (Chan) Rogers, P.E.,
Karyl Spiller Walsh

April 10, 2012

Minor Site Plan Decision
A123 Systems – 34 West Street
Battery Energy Storage System (BESS)

You are hereby notified that on April 10, 2012, at a duly called and properly posted meeting, the Medway Planning and Economic Development Board acted on the application of **A123 Systems, Inc. of Westborough, MA for approval of a minor site plan for the installation of one mobile containerized Battery Energy Storage System (BESS)** on a 5,700 square foot portion of the NSTAR Gas and Electric #65 Substation site at 34 West Street. After reviewing the application and information compiled during the public review process, the Board, on a motion by Karyl Spiller-Walsh, seconded by Chan Rogers, approved the application with CONDITIONS noted herein and with WAIVERS from the *Site Plan Rules and Regulations*. Those voting in favor were Andy Rodenhiser, Karyl Spiller-Walsh, Chan Rogers and Tom Gay. Robert Tucker abstained from voting as he was absent from the 3-13-2012 meeting when the Board reviewed the project.

SITE INFORMATION – The application pertains to a small portion of the 48.74 acre property at 34 West Street, near the intersection of West and Beech Streets. The parcel is located in the Industrial II zoning district, shown as Medway Assessors Parcel 2-59. The property is owned by Sithe West Medway LLC, a subsidiary of Exelon Corporation with which NSTAR Electric holds a long term lease agreement for its substation.

PROJECT DESCRIPTION/SCOPE OF WORK - A123 Systems proposes to install one mobile containerized BESS on a small portion of the subject parcel. A123 Systems has a 5 year site license with NSTAR for this pilot alternative technology project, which would be NSTAR's first in Massachusetts. The BESS uses advanced Nanophosphate lithium batteries to minimize and levelize changes in NSTAR's electric power system. This demonstration project will study, test and showcase the performance and reliability benefits of using a BESS within a suburban electric grid system for "capacity firming and ramp management." This project is part of the ISO-NE Alternative Technology Regulation (ATR) Pilot Program and is considered a green technology.

As proposed, the BESS will be located in a new fenced in yard adjacent to and south of the existing NSTAR substation building. The BESS container measures 53' long x 8.5' wide x 9.5' high. Auxiliary components to the BESS container include a 2 MW external inverter and various cabinets for a chiller, transformers, meters, etc. Lighting and landscaping are also proposed. When installed, the BESS will appear to be an extension of the existing NSTAR substation. Vehicular access would be provided from West Street via a partially paved, partially crushed stone driveway, 77' long by 16' wide. No personnel will work on site on a regular basis; access is needed only for routine and intermittent maintenance and emergency workers if ever necessary.

The site plan application, site plan drawings and supporting documentation were filed with the Town of Medway on February 13, 2012. The BESS site plan drawings are dated February 7, 2012 and were prepared by Vine Associates, a division of GZA GeoEnvironmental, Inc. Engineers and Scientists of Norwood, MA.

The complete application, proposed site plan, and all associated reports were on file with the Medway Town Clerk and the Planning and Economic Development office at the Medway Town Hall, 155 Village Street, Medway, MA and were available for inspection Monday through Thursday from 8:00 a.m. to 4:30 p.m. and Fridays from 8:00 a.m. to 1:00 p.m. The plans were also posted at the Planning and Economic Development web page at: <http://www.townofmedway.org>.

PROCEDURAL SUMMARY

- January 5, 2012 Medway Building Inspector/Zoning Enforcement Officer John Emidy provides a written determination that the proposed scope of work constitutes a minor site plan project pursuant to the Site Plan section of the Medway Zoning Bylaw.
- February 13, 2012 GZA GeoEnvironmental, on behalf of A123 Systems, submits an application for minor site plan approval to the Medway Planning and Economic Development Board. A meeting of the Medway internal inter-departmental review team met with the applicant and its consultants to review the project and provide information on other needed permits.
- February 23, 2012 Notice of the 3-13-2012 Public Briefing is mailed to abutters within 300' feet of the subject parcel. The Public Briefing Notice was posted with the Medway Town Clerk and at the Planning and Economic Development page on the Town's web site.
- February 23, 2012 Plans circulated to Town staff requesting review comments.
- March 13, 2012 Public Briefing commences.
- March 27 and April 10, 2012 Board deliberates, reviews decision and votes.

INFORMATION PROVIDED:

Application for Minor Site Plan Review dated February 9, 2012

Project Description/Narrative dated February 10, 2012 prepared by GZA GeoEnvironmental, Inc. of Norwood, MA – Michele Simoneaux, Peter Williams, P.E. and Gregg McBride

Stormwater Report – A123 Systems BESS Project, 34 West Street, Medway, prepared by Peter J. Williams, P.E., GZA GeoEnvironmental, Inc.

Request for Waivers from Site Plan Rules & Regulations – prepared by GZA GeoEnvironmental, Inc.

Section 204-3 (A) (7)	Development Impact Statement
Section 204-5 (C) (3)	Inventory of Existing Landscape on Site
Section 204-5 (D) (7)	Landscape Architectural Plan
Section 204-5 (D) (10)	Building Layout/Floor plan

The proposal is shown on plans titled *Battery Energy Storage System (BESS), A123 Systems Inc. NSTAR Station 65 West, 34 West Street, Medway, MA* dated February 7, 2012, prepared by VINE Associates, a division of GZA GeoEnvironmental, Inc. as follows:

Drawing C	Cover
Drawing 1	Site Context Plan
Drawing 2	Existing Conditions Plan
Drawing 3	Proposed Site Plan
Drawing 4	Landscaping, Architectural and Lighting Plan
Drawing 5	Details

DRAFT Decommissioning Plan, dated April 6, 2012 prepared by GZA GeoEnvironmental Inc.

TESTIMONY & REVIEW COMMENTS

Applicant & Representatives

- Michele Simoneaux and Peter Williams of GZA GeoEnvironmental, Inc.
- Chris Quaranta, Roger Lin and Jim Frawley of A123 Systems
- Kevin McCune, Richard Anderson, Frank Snyder and Duane Boyce of NSTAR

Review Comments

- Gino Carlucci, PGC Associates, Medway's Consulting Planner – March 8, 2012
- David Pellegri, Tetra Tech, Medway's Consulting Engineer – March 9, 2012
- John Emidy, Medway Building Commissioner – March 6, 2012 re: compliance with noise standards

ACTION on WAIVER REQUESTS - Approved

Section 204-3 (A) (7)	Development Impact Statement
Section 204-5 (C) (3)	Inventory of Existing Landscape on Site
Section 204-5 (D) (7)	Landscape Architectural Plan
Section 204-5 (D) (10)	Building Layout/Floor plan

CONDITIONS OF APPROVAL

1. **Plan Revisions** – The final plans presented for the Board's endorsement shall include the following revisions:
 - a. A signature box shall be provided on each sheet of the plan set for the endorsement signatures of Planning and Economic Development Board members.
 - b. A final Decommissioning Plan including a drawing and narrative acceptable to the Planning and Economic Development Board shall be included in the plan set as Drawing #6 and shall also be listed on the Cover Sheet.
 - c. The landscaping plan shall be revised pursuant to the PGC review letter dated 3/8/2012 – Zoning Comments, Item #3. (Attached)
 - d. Other technical revisions as specified in the Tetra Tech letter dated 3/9/2012. (Attached)
2. **Signage** – Signage on the BESS container will need to secure a permit from the Medway Building Commissioner which requires a review by the Medway Design Review Committee and a DRC Letter of Recommendation.
3. **Curb Cut for Driveway** – The applicant shall secure a *Street Opening Permit* from the Medway Department of Public Services prior to any site construction/installation.
4. **Plan Endorsement** - Within thirty (30) days after the Board has filed its *Decision* with the Town Clerk, the Applicant shall submit a *Certificate of No Appeal* from the Town Clerk and a final site plan reflecting all required revisions specified herein to the Board to review for compliance with the Board's *Decision*. The Applicant shall provide an original of the site plan in its final form to the Board for signature/endorsement. After endorsement, the Applicant shall provide 6 full copied sets of the endorsed plan documents to the Board plus an electronic file.
5. **Construction Observation**
 - a. Planning and Economic Development Board members, its staff, consultants or designated agents shall have the right to inspect the site at any time for compliance with the endorsed site plan and the provisions of this Decision.
 - b. The Department of Public Services may conduct inspections for any construction work occurring in the Town's right-of way in conjunction with the Town of Medway Street Opening/Roadway Access Permit.

6. **Project Completion** - Prior to the issuance of a permanent occupancy permit, the applicant shall provide the Board with a written certification of a professional engineer and/or architect registered in the Commonwealth of Massachusetts that all construction and site work has been completed in strict compliance with the site plan decision and the approved and endorsed site plan.

APPEALS - Any person aggrieved by the Board's *Decision* may appeal such to the court within twenty (20) days of the date the *Decision* is filed with the Town Clerk.

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ATTEST:



Susan E. Affleck-Childs, Planning and Economic Development Coordinator

Date: April 11, 2012

cc: John Emidy, Building Commissioner
Thomas Holder, DPS Director
Suzanne K. Kennedy, Town Administrator
Michele Simoneaux, GZA GeoEnvironmental, Inc.
Karon Skinner-Catrone, Conservation Agent
Alan Tingley, Police Chief
Paul Trufant, Fire Chief
Will Naser, Assessor

PGC ASSOCIATES, INC.

1 Toni Lane
Franklin, MA 02038-2648
508.533.8106
508.533.0617 (Fax)
pgca@comcast.net

March 8, 2012

Mr. Andy Rodenhiser, Chairman
Medway Planning Board
155 Village Street
Medway, MA 02053

Re: A123 Minor Site Plan Review

Dear Mr. Rodenhiser:

I have reviewed the proposed site plan submitted by A123 Systems, Inc. of Westborough for property at 34 West Street, Assessor's Map 2, Parcel 59.. The plan was prepared by GZA GeoEnvironmental, Inc. of Norwood and is dated February 7, 2012. The property is owned by Sithe West Medway, LLC, a subsidiary of Exelon Corporation of Norwood. NStar holds an easement for use of the property and A123 holds a 5-year lease from NStar on the site.

The plan proposes to install a Battery Energy Storage System on the site, as a pilot project to test the system. I have comments as follows:

Zoning

1. The property is located within the Industrial II district. This district specifically allows by right both electrical power generation and research and development facilities including but not limited to renewable or alternative energy. The proposed system represents the research and development phase of a component that is integral to renewable or alternative energy production as well as conventional electric power generation.
2. The proposed development meets all dimensional requirements of the Industrial II district.
3. The Industrial II district requires a 30 foot green belt adjacent to residential district boundary lines., planted with evergreen shrubs not more than 15 feet apart. The plan proposes 3 arbor vitae plants across the front of the facility to the westerly side of the driveway and entrance to the fenced compound. Since the distance involved from the driveway to the meter and other equipment outside the fenced compound is approximately 80 feet, there should probably be 5 shrubs in that area to meet the technical requirement of the bylaw. It should be noted that while the area across West Street is zoned residential, it is currently occupied by construction/trucking facility.

There are 3 additional shrubs proposed on the easterly side of the facility. Again, to meet the 15 feet apart requirement, there should be an additional shrub on this side for a total of 9.

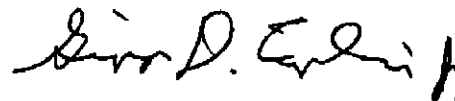
4. The submittal includes documentation demonstrating that the noise requirements of the Zoning Bylaw are met. The proposed new lighting to be mounted to the rear of the battery storage container also complies. However, an existing lamp post is proposed to be relocated to be in front of the facility. No information is provided as to whether this lamp post is in compliance with the lighting requirements.
5. No designated parking is proposed, but the site is not open to the public and there will be no employees on site. Occasional maintenance personnel can park within the fenced compound.
6. No signage is proposed. Any signage would need to conform to the sign requirements of the Zoning Bylaw.

Site Plan Rules and Regulations

7. Due to the limited nature of the proposed project, most of the site plan rules and regulations are not applicable. Waivers are requested for the requirements pertaining to submittals of a Development Impact Statement, Existing Landscape Inventory, Landscape Architectural Plan, and Building Layout/Floor plan. All of these requests are appropriate for this project.
8. There are some minor deviations from the site plan rules and regulations for which waivers have not been requested. For example, no scale is provided for the locus plan. The zoning district boundary is not shown on the site context plan. However, a very detailed and specific narrative statement is provided, which, combined with the plans, provides adequate information to determine that the proposal meets the criteria of Section 203-9 C.

If there are any questions about these comments, please call or e-mail me.

Sincerely,



Gino D. Carlucci, Jr.



March 9, 2012

Mr. Andy Rodenhiser
Chairman, Planning and Economic Development Board
Medway Town Hall
155 Village Street
Medway, MA 02053

**Re: 34 West Street
Site Plan Review
Medway, Massachusetts**

Dear Mr. Rodenhiser:

Tetra Tech (TT) has performed a review of the proposed Site Plan for the above – mentioned project. The project includes the installation of a mobile containerized Battery Energy Storage System adjacent to NSTAR's Substation on West Street in Medway. The site is primarily grass currently and the proposed improvements will disturb approximately 5,700 square feet of the property. The new facility will require the installation of utility connections, fencing, paved vehicular access drive, and a crushed stone equipment area underground electric from within the property.

TT is in receipt of the following materials:

- A plan (Plans) set entitled "Battery Energy Storage System (BESS), A123 Systems, Inc., NStar Station 65 West, 34 West Street in Medway, Massachusetts", dated February 7, 2012, prepared by Vine Associates A Division of GZA GeoEnvironmental, Inc. Engineers and Scientists. (GZA)
- A drainage report (Drainage Report) entitled "Stormwater Report, A123 Systems, Inc., BESS Project, 34 West Street, Medway", prepared by GZA
- Application for Review and Approval of a Minor Site Plan Project and Form Q-Request for Waiver from Rules and Regulations, prepared by GZA. dated February 9, 2012.

The Plans, Drainage Report and accompanying materials were reviewed for conformance with the Town of Medway, Massachusetts Planning Board Rules and Regulation, the MA DEP Storm Water Management Standards (Revised January 2008), and good engineering practice. The following is a list of comments generated during the review of the design

Engineering and Architecture Services
One Grant Street
Framingham, MA 01701
Tel 508.903.2000 Fax 508.903.2001



documents. Reference to the applicable regulation requirement is given in parentheses following the comments.

The following items were found to be not in conformance with the Rules and Regulations for the Submission and Review of Site Plan (Chapter 200), or requiring additional information:

Article IV-Site Plan Submission (Section 204)

1. The applicant requested a waiver for Development Impact Statement. (Ch. 200 §204-3.A-7)
2. The applicant should verify that scale 1" = 20' has been approved in advance by the Planning Board. (Ch. 200 §204-4.B)
3. Elevations shall refer to North American Vertical Datum of 1988 (NAVD88). (Ch. 200 §204-4.D)
4. A locus plan showing the site and its boundaries in relation to all surrounding streets within two thousand (2,000) feet of the perimeter of the site. The plan shall be a maximum scale of one (1) inch equals one thousand (1,000) feet. (Ch. 200 §204-5.B-1)
5. The applicant shall verify with Planning Board if partial lot lines with dimensions are acceptable. (Ch. 200 §204-5.B-3)
6. The applicant requested a waiver for the Existing Landscape Inventory being prepared by a Professional Landscape Architect licensed in the Commonwealth of Massachusetts. (Ch. 200 §204-5.C-3)
7. The applicant requested waiver for Landscape Architectural Plan. (Ch. 200 §204-5.D-7)
8. The applicant requested waiver for Building Layout/Floor Plan. (Ch. 200 §204-5.D-10)

Article V-Development Standards (Section 205)

9. The site must be evaluated as a whole in determining the number of curb cuts to be permitted. (Ch. 200 §205-3.A-1)



10. The applicant should add Siltsack Sediment Trap Detail for nearby catch basin. (Town of Medway's Construction Details CD-32) (Ch. 200 §205-11)

The following items were found to be not in conformance with the MA DEP Storm Water Management Standards, or requiring additional information:

11. We do not agree with the designation of this project as a "redevelopment". The narrative states that the project is being constructed on a previously developed site therefore it qualifies as a redevelopment. Standard 7 of the MADEP Stormwater Regs defines a redevelopment project to include – *Development on previously developed sites, provided the redevelopment results in no net increase in impervious area.* The proposed project is sited on a fully established lawn area, and results in an increase in impervious area.
12. The drainage calculations were performed with the assumption that the site contains a Hydrologic Soil Group D Soil. Statements are made throughout the Redevelopment Checklist that standards were not met because of the poor soil condition. The NRCS Soil Survey provided in the report indicates that the soils are Udorthents, sandy, which is not indicative of an HSG "C" or "D" Soil.
 - General Stormwater Comment- We do agree with the overall statement that the peak flows and volumes are negligible and will not have a negative impact on the site, so we don't necessarily require a redesign based on the comments above at this time. The majority of the runoff from the proposed pads and roof top drain to the crushed stone surrounding the structures. This stone may provide the required recharge and water quality volumes required, in addition to providing peak flow mitigation and TSS removal. We recommend discussing this topic further at the hearing and identifying the best path moving forward.

The following items were found to be not in conformance with good engineer practice or requiring additional information:

13. The applicant shall verify the scale for the "Unnamed Aerial Plan" on the Cover sheet.
14. What types of erosion control are implemented for nearby catch basin and outlet (Conc. Headwall near the corner of Beech Street)?
15. The Narrative states that the system is temporary (5 year duration). What will happen to the site after that time?



16. It appears that there are a couple of buildings within the existing crushed stone area not identified on the existing conditions plan. I don't think that these structures will affect the proposed conditions in any way however, I'd like to confirm that they don't conflict with the underground electric conduit installation.
17. How thick is the crushed stone area within the proposed fence?
18. The plans provided in the Narrative states that the maximum slope of the proposed driveway shall be 3% yet the drawings indicate a 3.5% slope. The stamped drawings dictate in this case, and 3.5% is an acceptable slope, however, if the intent is to maintain a 3% maximum then the drawings should be modified accordingly.
19. The proposed underground electric line extending from Utility Pole #43/10 to the proposed fenced area runs through an existing fire hydrant. The electric line location should be modified to avoid this conflict.
20. Please identify what the required site distances are based on existing West Street classifications.
21. There is currently seven (7) arborvitae proposed in front of the proposed chain link along two sides of the development. Is this acceptable screening from the board? The Narrative states that the development is temporary. Additional screening may be desired if the fencing is intended to stay in place beyond the five (5) year period.
22. The limit of work line between Drawings 3 and 4 are not consistent. The line on Drawing 4 accommodates the soil stockpile.
23. If not already on the plans, please add a note that any areas disturbed during construction shall be restored with loam and seed or a suitable alternative.
24. On Drawing 4 there is a note that states "Lamp post to be reused and relocated from area in front of the property." There doesn't appear to be any existing lamp posts on the site that could be relocated. There is a utility pole adjacent to this area with a spotlight attached to it but I don't think the intent was to relocate the utility pole.



TETRATECH

These comments are offered as guides for use during the Town's review. If you have any questions or comments, please feel free to contact us at (508) 903-2000.

Very truly yours,

David R. Pellegri, P.E.
Senior Project Manager

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