Tisbury School Building Committee 2019-2020

6:00PM, Wednesday, February 18, 2020 Tisbury School - 'White House'

TSBC Members Present: Chair Rachel Orr, Harold Chapdelaine, John Custer,

Sean deBettencourt, Peter Gearhart, Rita Jeffers,

Reade Milne*, Jim Rogers*, Michael Watts,

Others including: Anna Edey – Solar Green design, Recorder – Marni Lipke,

Daedalus Projects – Christina Opper, Amanda Sawyer, Tappé – Matt Barnhart, Cesar Dedios, G & V – Wayne Mattson,

TSC - Amy Houghton, Janet Packer, Michael Watts,

John Custer – Principal, Matt D'Andrea – Superintendent,

Sean deBettencourt, Meredith Goldthwait, Rita Jeffers,

Parents: Angie Francis, Sarah York,

Town: Selectman Jeff Kristal, Town Administrator Jay Grande,

Planning Bd. – Ben Robinson, FinCom – Jynell Kristal, Sarah York

Press: Rich Saltzberg – MV Times

* TSBC members late arrivals or early departures.

1. Call To Order

Schools:

The Tisbury School Building Committee 2019-2020 (TSBC) meeting was called to order at 6:06PM. (*Recorder's note: discussions are summarized and grouped for clarity and brevity.*)

2. Attendance - Attendance was called.

3. Tour of School Campus

- As the TSBC was starting to make decisions, it was important to be more familiar with the building. Principal John Custer lead a 45 minute tour of all three floors of the School. The separate components of the building history could be clearly seen:
- original 1929 building and 1938 addition,
- a small addition in the 1950s,
- the 1995 gym wing, and
- 2002 temporary "white house" rented after Edgartown use.
- Classrooms showed a variety of heating and ventilation systems, from cast iron radiators to heating units used from the 1920s on. Grates or ventilation pipes were sometimes behind lockers or blocked off.
- Classroom sizes varied greatly: a third grade room was about 700 sq. ft., The Spanish room was about 440 sq. ft. the largest was the sixth grade math and science room, with a 2017-18 laminate floor.
- The TSBC visited two classrooms that were each shared by 2 teachers giving simultaneous classes, one dedicated to Special Education (SpEd)(sited as out of Dept. of Elementary and Secondary Education (DESE) regulation), and one for Math and Reading remediation. The Spanish and Music classrooms were below grade. There were two 'tutorial' spaces, one for guidance and one for English Language Learner (ELL) classes that were small office size without windows.

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- The nurse's office had no privacy and was barely wheelchair accessible.
- The TSBC asked about cafeteria ventilation and noted eating space was so small that the school day schedule had to be built around cafeteria availability.

5. Website and Public Outreach

- The TSBC was interested in regular weekly tours for Tisbury residents.
- Ms. Anna Edey asked about examination of wall cores for possible alternative construction plans.
- Other outreach projects could be a video tour, newsletter and social media posts.
- Mr. Harold Chapdelaine obtained the abutter list from the Assessor (see below: Actions).

6. Grant Opportunities

- Mr. Chapdelaine reported the Massachusetts Historical Commission had only \$800,000 in matching grants for the entire Commonwealth. Even if the School became a designated building and was awarded a grant, it would require signing historical preservation agreements in perpetuity, severely restricting construction/renovation options.
- Energy Committee Chair Bill Straw recommended reaching out the Cape Light Compact for sustainability and solar funding (see below: Actions).

<u>4. Discussion of Sustainability Issues, Including Energy and Heating, Ventilation, and Cooling (HVAC)</u> (See documents on file.)

- Tappé Architects and Griffin & Vary Consulting Engineering Services, Inc. presented PowerPoint explanations of sustainability components to maintain ratio that did not deplete future resources: energy performance (conversation and generation), water efficiency and environmentally friendly construction materials.
- The building envelope (walls, roof, windows, doors) had to be tightened/insulated to retain energy (heat, cool, light).
- Mechanical and electrical systems should be as efficient as possible.
- Energy generation should be maximized to replace what was used.
- Different techniques were needed to insulate the different components of the building and Mr. Cesar Dedios of Tappé explained the technical requirements and options for interior insulation of brick walls and roofs, depending on age and structure. This would include analysis of the brick to determine moisture content.
- New construction allowed for greater flexibility and super insulation.
- Triple glazed windows would increase envelope integrity and decrease glare.
- Mr. Wayne Mattson of G & V, Inc. presented non-fossil fuel (electric) heat pump mechanical options, including various "mini-split" units for different rooms. Prices varied but were decreasing as units became more common. Compressors were outside the building, reducing noise, and every classroom would have a thermostat. Modern ducts were small and could be hidden in architectural spaces and hallways.

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- Sinks, showers and toilets would be low flow/low flush. Water coolers/drinking fountains would be replaced by bottle filling stations. Collected rainwater could be used for gray-water purposes.
- Energy Use Intensity (EUI) measured how much energy a building used. Elementary schools were generally 48-50 EUI, which Tappé/G & V aimed to reduce. The existing building (poor insulation/outdated systems) was probably rated at ~ 70 EUI or higher.
- The roof and possible new addition had the correct orientation for solar panels and planned green roof spaces (gardens, etc.) would also reduce energy, absorb water and act as a teaching tool—as would courtyard gardens. Roofs were now made solar ready.
- Grant opportunities included: Cape Light Compact, Vineyard Power and Massachusetts Dept. of Revenue solar credits.
- The goal was to use aesthetic, durable materials with low volatile organic compounds (VOCs) and minimal off-gassing; e.g. cement and steel were for weight-bearing only.
- Demolition materials were recycled rather than dumped in a landfill.

The TSBC raised a number of issues.

- Increased internal insulation on the outside walls would decrease classroom size. In addition Spray foam insulation produced off-gassing that had to be balanced with its benefits.
- If brick testing showed a high moisture content traveling moisture would have to be identified and addressed and another form of insulation would have to be used.
- Access to new ductwork and heating units was not difficult. They were hidden behind a removable grill. Maintenance would likely involve only fans, belts, etc. Condensers had to be thrown away and replaced. Piping would be hidden in custodial closets or mechanical rooms.
- The TSBC strongly reminded Tappé/G & V that the goal was a net zero building and requested a cost analysis for 100 years (not for today). Hard numbers on insulation were needed to project Photo-Voltaic (PV/Solar) capacity.
- Rainwater collection (with installation costs) was filtered and went into a separate pipe system. If/when rainwater was depleted the building switched to standard water source and piping. A gray-water system would not only saving drinking water but also reduce stormwater pollution in local ponds, particularly Tashmoo. Members disagreed on whether to include this system
- In a discussion on window requirements Daedalus noted that triple glazed windows were less expensive than double-glazed that met similar specs. The facade would be "tuned" depending on sun exposure. There was a balance between passive solar heat and light/glare.

Ongoing Matters which May Be Discussed

7. School Committee (TSC) Report

• The TSC Fiscal Year 2021 (FY21) Budget had money for current building repairs/maintenance—which was not the purview of the TSBC.

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8. Board of Selectmen (BOS) Report

- Two Special Town Meeting (STM) Warrant Articles proposed dedicating short-term rental and marihuana revenues to the Capital Building Stabilization Fund.
- The FY21 Selectmen's Budget included TSBC funds.

9. Correspondence (See documents on file.)

• Chair Rachel Orr thanked Prin. Custer for his Shared Services explanation.

10. Upcoming Agenda Items

11. Topics Not Reasonably Anticipated by the Chair Within 48 Hours of the Meeting

Adjournment

The TSBC thanked Prin. Custer for the campus tour.

• ON A MOTION DULY MADE BY MR. MICHAEL WATTS AND SECONDED BY MR. HAROLD CHAPDELAINE THE SCHOOL BUILDING COMMITTEE MEETING UNANIMOUSLY ADJOURNED AT 8:44PM: 8 AYES, 0 NAYS, 0 ABSTENTIONS.

Appendix A: Meetings/Events:

- TSC 8:30AM, Tuesday, March 10, 2020 Tisbury School
- TSBC 5:00PM, Tuesday, March 10, 2020 TBD
- TSBC 5:00PM, Monday, March 23, 2020 TBD
- BOS ATM Overview Thursday, March 26, 2020 KCT
- TSBC 5:00PM, Monday, March 30, 2020 TBD
- Special/Annual Town Meeting 7:00PM, Tuesday, March 31, 2020

Appendix B: Actions

Ms. Opper – ask Richard Marks to contact Cape Light Compact on behalf of Town.

Mr. Watts – draft letter to abutters re: whether they want agendas.

Ms. Orr/Prin. Custer – consider weekly Tisbury School tours.

Ms. Orr – research MV Museum meeting space (does it have to be municipal?)

Ms. Orr – set one agenda item meeting re: prep for ATM.

Appendix C: Documents on File:

- Agenda 2/18/20
- Sign in Sheet (2 p.) 2/18/20
- Orr + emails re: Tisbury School (Use as Protected or Shelter Location) (4 p.) 2/13/20
- Custer email re: Change in 2/18 Meeting Time 2/13/20
- Sustainability Strategies Tisbury School PowerPoint (7 p.) 2/18/20
- Efficiency and Sustainability (4 p.)
- Sustainability Glossary of Terms

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continued

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Minutes respectfully submitted by Office On Call/Marni Lipke.	
Marni Lipke – Recorder	Date
Rachel Orr – TSBC Chair	Date