

**COMMONWEALTH OF MASSACHUSETTS
ENERGY FACILITIES SITING BOARD**

Petition of Hillman Energy Center, LLC	)	
Pursuant to G.L. c. 40A, Section 3 for an	)	
Exemption From the Zoning Bylaws of the	)	EFSB-25-08
Town of Tewksbury, MA	)	
	)	

**COMMENTS OF INTERVENOR TEWKSBURY BOARD OF HEALTH
ON TEST PIT AND GROUNDWATER SAMPLING MEMORANDUM**

April 27, 2026

Peter A. Ray, Secretary
Department of Public Utilities
One South Station, 3rd Floor
Boston, MA 02110

Dear Secretary Ray and Members of the Energy Facilities Siting Board:

The Tewksbury Board of Health (the "Board") submits the following comments on the "Test Pit and Groundwater Sampling - Hillman Energy Center Battery Energy Storage System" technical memorandum dated April 17, 2026 (the "Memo") for the proposed Hillman Energy Center Battery Energy Storage System ("BESS") located at 73 and 75 Hillman Street in Tewksbury, Massachusetts, in the above-referenced docket.

The Board's jurisdiction and interests include the protection of public health, groundwater and drinking water resources, and environmental health within the Town of Tewksbury.

The Board notes that the Town Manager advised the Board of Health on multiple occasions that Special Town Counsel Jeffrey Bernstein, Esq. could not represent the Board of Health, as counsel's representation was limited to the Town's position in this proceeding. The Board's participation is grounded in its independent statutory responsibilities under G.L. c. 111 to protect public health,

and its questions and requests in this filing reflect that charge rather than any formal position for or against the project.

Accordingly, the Board appears as an unrepresented intervenor through its Director of Public Health. The Board has reviewed the Memo and the associated soil logs and offers the following comments and requests for additional information and conditions.

1. Groundwater Monitoring Duration and Representativeness

The Memo indicates that groundwater elevations at monitoring wells installed in test pits TP-02, TP-03, TP-05, and TP-08 were recorded from March 26, 2026 to April 9, 2026, and that only the "stabilized" period after March 28, 2026 is being used for design purposes. The Memo further notes that the USGS reference conditions at the Andover USGS groundwater index station (Well 462) were "Below Normal" as of March 21, 2026.

Given the limited monitoring window of approximately 10 to 12 days of stabilized data, and the below-normal groundwater conditions during that window, the Board is concerned that the seasonal high groundwater ("SHGW") elevations selected may not represent higher groundwater conditions that occur in wetter years or during late winter and early spring high-water periods.

The Board respectfully requests that the EFSB require the Petitioner to:

1. Extend or supplement groundwater monitoring to capture conditions representative of higher-groundwater years, or provide a rigorous justification, referencing applicable MassDEP guidance including Title 5 and the MassDEP Stormwater Handbook, for why the existing data range is protective of public health and groundwater resources.
2. Explain whether and how the SHGW elevations used for stormwater design have been adjusted to reflect typical or conservative seasonal high conditions in light of the "Below Normal" status at the time of testing, and demonstrate that the selected SHGW elevations will remain protective in wetter years.

2. Selection of SHGW and Safety Factors

The Memo relies on multiple data sources for groundwater elevation at each test pit location, including standing water observed in test pits, redoximorphic features, and monitoring well maximum groundwater elevations. Table A and Table B summarize these data and identify SHGW elevations to be used for design of subsurface infiltration systems.

To allow the Board and the EFSB to assess whether the SHGW values incorporate an adequate margin of safety for public health and groundwater protection, the Board requests that the Petitioner be required to:

1. Provide a clear explanation, for each test pit location, of which specific data point was selected as SHGW and why that choice is conservative.
2. Identify any safety factor or upward adjustment applied to the measured or observed SHGW to account for interannual variability, data limitations, and climate-driven changes, or explain why no such factor is proposed.
3. Cross-reference the SHGW determination methodology to MassDEP Title 5 (310 CMR 15.000) and the MassDEP Stormwater Handbook, and demonstrate that the same or greater conservative standard used to protect onsite wastewater and groundwater is being applied to the design of stormwater infiltration associated with the BESS.

3. Shallow Groundwater, Coarse Soils, Existing Record Evidence, and Suitability for a BESS with Infiltration

The Memo documents that all test pits encountered standing groundwater, with depths to SHGW ranging from approximately 43 inches to 95 inches below grade, and that the site is underlain by predominantly sandy and coarse stratified deposits. These conditions facilitate rapid infiltration and subsurface transport of contaminants in the event of a release from BESS equipment, transformers, or firefighting runoff.

The Board understands that the proposed facility is located within the Zone II wellhead protection area for the Juniper Lane drinking water supply well. The Juniper Lane well is located approximately 1,560 feet from the proposed facility (Tr. 285-286). From a public health perspective, this proximity increases the importance of demonstrating that stormwater and groundwater controls are fully protective under both normal and upset conditions.

The Board notes that the hearing record in this docket already contains testimony bearing directly on stormwater adequacy at this site. The Board's witness Scott Horsley testified that approximately 80% of stormwater runoff at the proposed facility bypasses treatment (Tr. 1421), and that the design would result in a roughly 50% reduction in required treatment capacity (Tr. 624-625). Mr. Horsley also testified that the stormwater system contains no shutoff valve (Tr. 120), meaning that in a spill or fire event there is no mechanism to isolate contaminated runoff before it enters the system.

The Memo does not address or reconcile these existing record facts with its test pit and groundwater findings. The Board further notes that MassDEP's 2025 Guidance on Public Health, Safety and Environmental Impacts of Electric Battery Storage and Electric Vehicle Chargers identifies the regulatory framework for protecting public health and the environment, including MassDEP-approved Zone II wellhead protection areas, in connection with BESS facilities. The Memo does not explain how its conclusions align with this guidance or demonstrate that the project's stormwater and firefighting runoff controls will meet the guidance's public health and environmental protection objectives.

The Board requests that the EFSB require the Petitioner to:

1. Identify any applicable state or industry guidance specifically addressing siting and design of BESS facilities in areas with shallow groundwater and highly permeable stratified soils and demonstrate how the project complies with such guidance.
2. Provide detailed design information showing the physical and hydraulic separation between BESS equipment areas, including batteries, transformers, and associated containment structures, and the subsurface infiltration systems, including liners, curbing, grading, and collection systems that will prevent electrolyte, oil, or contaminated firefighting runoff from entering infiltration practices.
3. Reconcile the Memo's findings with the existing hearing record testimony regarding the absence of a stormwater shutoff valve, the 80% bypass of treatment, and the 50% reduction in treatment capacity.
4. Affirmatively demonstrate how the project's design complies with MassDEP's 2025 Guidance on Public Health, Safety and Environmental Impacts of Electric Battery Storage and Electric Vehicle Chargers, including protection of MassDEP-approved Zone II wellhead protection areas, before any approval issues.
5. Demonstrate that under both normal operations and credible upset conditions, including a BESS fire, spill, or leak, stormwater infrastructure will not serve as a pathway for contaminants to reach the documented shallow groundwater.

4. Fill Materials, Potential Contaminants, and Stormwater Quality

The test pit logs indicate that fill materials are present above native soils at multiple locations and include debris such as bricks, plastic, and other heterogeneous materials. The Memo does not address whether any environmental sampling of the fill or native soils has been conducted to evaluate potential contamination that could be mobilized by infiltrating stormwater.

The Board requests that the EFSB require the Petitioner to:

1. Indicate whether soil or groundwater quality sampling has been conducted in the footprint of the proposed infiltration systems to evaluate potential contaminants, and if so, provide the results.
2. If no sampling has been conducted, either perform an appropriate level of environmental sampling and risk evaluation in consultation with MassDEP or provide a detailed justification for concluding that such sampling is not necessary for a BESS project relying on subsurface infiltration.

3. Provide an assessment of whether infiltrating stormwater through existing fill layers could mobilize pre-existing contaminants to groundwater and describe any design or treatment measures proposed to prevent or mitigate this risk.

5. Spatial Representativeness of Test Pits and Monitoring Points

The Memo notes that several test pits were located adjacent to, rather than directly within, the proposed subsurface infiltration system footprints due to constraints such as utilities, buildings, and on-site equipment storage. Some test pits were also terminated early due to collapsing sidewalls or obstructions.

The Board requests that the EFSB require the Petitioner to:

1. Provide a plan clearly showing the exact locations of each proposed infiltration system relative to the test pits and monitoring wells, with distances labeled and a narrative discussing the representativeness of each test pit and monitoring point for its associated system.
2. For any infiltration area where subsurface data are from adjacent rather than within-footprint locations, either conduct additional subsurface investigation within or immediately adjacent to the actual footprint or demonstrate that the SHGW and infiltration assumptions applied are appropriately conservative to account for potential spatial variability in stratified deposits.
3. Confirm whether any areas of the site were not investigated but will support critical BESS or stormwater infrastructure, and if so, describe how those areas will be evaluated prior to construction.

6. Compliance with MassDEP Stormwater Standards and Vertical Separation

Adequate vertical separation between infiltration systems and SHGW is a key public health protection, as it directly influences both treatment performance and groundwater quality. The Memo relies on MassDEP Title 5 Form 11 for soil suitability assessment but does not explicitly demonstrate compliance with MassDEP Stormwater Standards, including required vertical separation between the bottom of infiltration systems and SHGW.

The Board requests that the EFSB require the Petitioner to:

1. Provide a table for each proposed subsurface infiltration system listing surface elevation, bottom elevation of the infiltration system, SHGW elevation and method used, and resulting vertical separation, and explicitly demonstrate compliance with MassDEP Stormwater Standards.

2. Include plan and profile drawings for each infiltration system that graphically depict grade, system components, and the SHGW elevation used for design.
3. Confirm that the vertical separation criteria remain satisfied under conservative SHGW assumptions, including potential future increases in groundwater levels.

In addition to the MassDEP Stormwater Standards and Title 5 considerations discussed above, the Board notes that the project site lies within the Town's Groundwater Protection District and MassDEP-approved Zone II wellhead protection area, where the Tewksbury Zoning Bylaw requires a minimum three (3) foot vertical separation between the bottom of subsurface infiltration systems and seasonal high groundwater. The Board respectfully requests that the EFSB requires the Petitioner to demonstrate compliance not only with MassDEP's minimum separation requirements but also with this more protective local three-foot standard. The Board further notes that the Town Engineer has identified an apparent error in the plotted ground elevation at Test Pit TP-08 in the applicant's materials, such that correcting the elevation increases the estimated seasonal high groundwater elevation and reduces the available vertical separation. This reinforces the need for conservative seasonal high groundwater determinations, appropriate safety factors, and clear tabular and graphical demonstrations that all infiltration systems will maintain at least the required separation under corrected and conservative groundwater assumptions.

7. Long-Term Groundwater Monitoring and Response Planning

The Memo addresses only pre-construction test pits and short-term groundwater monitoring and does not describe any long-term groundwater monitoring or response plan for the operational life of the BESS.

The Board recommends that any approval include conditions requiring:

1. A long-term groundwater monitoring plan that includes at least one downgradient monitoring well with periodic sampling for parameters relevant to BESS electrolytes, transformer oils, and related contaminants, as well as standard groundwater quality indicators.
2. An operations and maintenance plan that includes procedures for detecting, investigating, and reporting any evidence of groundwater or soil contamination associated with the facility; promptly notifying the Tewksbury Board of Health, MassDEP, and other applicable agencies of any such findings; and implementing timely remedial measures to protect public health and groundwater resources.
3. Periodic reporting to the Tewksbury Board of Health of groundwater monitoring results, with clear identification of any trends or exceedances of applicable standards or background conditions.

8. Climate Change, Extreme Events, and Firefighting Runoff Management

The Memo does not address how projected changes in precipitation intensity, storm frequency, or groundwater regimes over the design life of the facility may affect SHGW, stormwater system performance, or public health protection. Nor does it address the management of potentially contaminated firefighting runoff in the event of a BESS incident.

The Board recommends that any approval require the Petitioner to:

1. Demonstrate that the stormwater and groundwater protection design, including infiltration systems, containment measures, and vertical separation, remains protective under reasonable climate change and extreme-event scenarios over the anticipated facility life.
2. Provide a firefighting runoff and spill management plan, developed in consultation with the Tewksbury Fire Department and MassDEP, that describes how runoff from BESS fires or significant spills will be contained, collected, and managed so that it does not infiltrate into the shallow groundwater system; identifies any temporary or permanent isolation measures to prevent firefighting runoff from entering infiltration systems; and addresses cleanup, monitoring, and public health protections following a BESS incident.

Conclusion

The Tewksbury Board of Health appreciates the opportunity to provide these comments on the Test Pit and Groundwater Sampling Memorandum for the Hillman Energy Center BESS project. The Board respectfully requests that the EFSB fully consider these public health and groundwater protection concerns and require the additional information, analyses, and conditions outlined above as part of its review of EFSB 25-08.

Please do not hesitate to contact the Board should you require any additional information or clarification.

Respectfully submitted,

Tewksbury Board of Health

By: Shannon Gillis

Shannon Gillis, REHS, Certified Soil Evaluator

Director of Public Health

Appearing as an unrepresented intervenor on behalf of the Tewksbury Board of Health

cc:

Town Manager

Tewksbury Select Board

Tewksbury Conservation Commission

Tewksbury Town Engineer

Tewksbury Fire Department

Hillman Energy Center, LLC and representatives

Donna Sharkey, Presiding Officer, EFSB