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MEMORANDUM

TO: Susan Bottan, SFO
Town of Wayland School Department
41 Cochituate Road
Wayland, MA 01778

DATE: February 16, 2017

FROM: Kevin R. Dandrade, PE, PTOE
Eric K. Gerade, PE, LEED AP

PROJECT NO.: T0558.17

RE: School Bus Parking Site Evaluation Recommendations

TEC, Inc. (TEC) was retained by the Town of Wayland School Department to review and evaluate Town owned properties where approximately twenty one (21) school buses, twenty-three (23) automobiles and one work trailer can be sited for the relocation of the existing bus park facility, currently located at 480 Boston Post Road (Route 20).

SITE EVALUATION SUMMARY

In previous memoranda to the Town, dated December 19, 2016 and January 6, 2017, TEC identified the initial site due diligence that was performed, provided preliminary site assessments of four potentially advantageous parcels, and provided conceptual layout plans and preliminary construction cost estimates each property. Following the preliminary package, TEC was tasked with evaluating two additional sites, including the Loker Conservation Area and the Wayland Middle School property. Most recently, a portion of the Old Town Landfill was identified as potential site, which was further evaluated by TEC and the Town of Wayland.

The Town of Wayland School Department requested a recommendation from TEC for the top two advantageous properties based on the feedback and comments received during this site evaluation process.

Throughout the preliminary screening process, similar concerns have been raised for each property, including property ownership (i.e., which department(s) should be involved, or Town entity actually owns the parcel), existing encumbrances on the property (i.e., recreation and/or State-designated park land), location (i.e., primarily within a residential area), archaeological concerns, and environmental/hazardous waste contamination concerns. Although some of these items were peripherally reviewed by TEC as part of this assignment, many of these questions need additional research and/or survey to confirm as part of the pending design and permitting processes.

TEC reviewed the characteristics of the Old Town Landfill site with Town staff subsequent to the issuance of the prior memoranda. Though the property is in a desirable location because there are no adjacent residential properties and provides a similar proximity to the current bus

Plan | Permit | Design | Construct

parking area, we have significant concerns that do not make this property as advantageous as others identified to date. The following are the key attributes that contribute to this finding:

- The geometry of the land area outside the documented limits of the closed landfill (circa 1978 plan) leaves approximately 0.6 acres;
- There is potential for safety and capacity issues with the access and egress at Route 20 (MassDOT jurisdiction) due to the limited room to stage vehicles for tandem parking;
- The reuse of the property will require extensive floodplain, endangered species, and conservation permitting given its proximity to the Sudbury River and the Great Meadows National Wildlife Refuge;
- There are likely significant and costly permitting requirements with the Massachusetts Department of Environmental Protection (MassDEP), requiring a landfill permitting specialist;
- The Town may potentially incur additional monitoring and testing requirements prior to, during and post construction that are not currently required based on the prior closure of this landfill site.

TEC does not recommend pursuing this site. Any other evaluation of this site should involve concurrent efforts by a consulting firm that has expertise in landfill permitting and the sampling and handling of potentially hazardous materials.

SITE SELECTION RECOMMENDATIONS

Based on direction from the School Department, TEC was advised to consider a parcel of land that is currently under the control of the Town of Wayland Public Schools to potentially reduce legal and permitting efforts, and allow for a consistent land use for these Town owned parcels. Therefore, TEC recommends that the Town of Wayland School Department select the **Claypit Hill Elementary School** or the **Wayland Middle School** properties for the proposed bus parking facility.

1. 86 Claypit Hill Road (Parcel ID: 19-072A) – Claypit Hill Elementary School

The Claypit Hill Elementary School has additional land area available to construct a bus parking facility. As previously identified in the December 19, 2016 memorandum prepared by TEC:

This 1.25-acre bus parking site is part of the Claypit Hill Elementary School complex, directly south of the existing parking lot for the school and playing fields. The existing parking field can be extended in a southerly direction to be utilized for the bus parking facility. Due to the configuration of the existing parking field, a total of sixteen new parking spaces are provided. The existing parking field appears to have excess capacity and could provide the additional employee parking requested. The area available is generally square in shape and currently wooded with relatively flat topography. Electricity can be provided by the existing electrical utility currently servicing the school. The Claypit Hill Elementary School complex is located within a residential area. The parking lot expansion will reduce the natural buffer to an existing residence.

Based on recent discussions with Town of Wayland School Department and DPW staff, other sub-alternatives for this location may include modifications to the existing playing fields and school driveways to better accommodate the current bus parking needs to keep the area separated from the existing parking field and reducing on-site vehicle and pedestrian conflicts. The primary concern expressed for this location is the residential neighborhood surroundings. However, it should be noted that buses currently transport students to this location and there is only one residential structure within 300 feet of the proposed parking site. Any design for this location should contemplate visual screening along the periphery of the parking lot.

The estimated construction cost for this parcel ranges from \$140,000 to \$230,000, but does not contemplate any contingency for alternative designs. Therefore, we recommend allocating an additional \$150,000 to \$200,000 of funding for potential field relocation or driveway reconfiguration.

2. 201 Main Street (Parcel ID: 47D-058B) – Wayland Middle School

The Middle School Property was identified in the January 6, 2017 memorandum:

This 2.0-acre bus parking site is part of the Wayland Middle School complex. The westerly half of this property is located within the Aquifer Protection District, with an area to the northeast of the existing Middle School building that is outside of the Aquifer Protection District, which was identified for the proposed parking facility. Moderate land/tree clearing will be required for construction of the parking facility which also requires a longer access driveway to access the area for development. It appears that the project limits will be outside of Conservation Commission jurisdictional areas. There are utility poles and overhead wires along Joyce Road and electric infrastructure within the Wayland Middle School complex for access to electrical service. A gated connection to Joyce Road could also be provided, however, would require an access driveway through a residential area. Refer to Figure 5 for the proposed Conceptual Plan for this property.

Additional alternatives were analyzed at the Middle School parcel including, utilizing the existing parking area for the bus site evaluation and the cleared area to the north of the driveway entrance, across from the former Department of Public Works (DPW) facility. TEC recommends exploring the "Alternative Compact Layout" as shown in Figure 5 (Concept 5) from the January 6, 2017 memorandum because it is significantly less impactful than the concept that would be constructed entirely within the wooded area to the northeast. Concept 5A, issued by TEC on January 17, 2017, provides a potential alternative for parking on this parcel closer to Main Street. However, this lies within an area identified as a former uncapped landfill and lies wholly within the Aquifer Protection District. One benefit of these sites is a potential for shared parking between the Middle School and the proposed library given the proximity of the two uses.

This location currently has bus traffic for students and heavy construction equipment accessing the former DPW yard. Public Safety officials expressed the need for a traffic signal at the

driveway entrance, which could be a related need for the parking facility construction and/or the future library that is programmed at the former DPW facility; this was assumed to be a separate infrastructure project. Concerns relating to the constructing the bus parking facility include the close proximity to an abutter, modification to existing stormwater management system, and potential environmental concerns as this area was identified as an uncapped landfill by the MassDEP.

The estimated construction cost for this parcel ranges from \$230,000 to \$410,000, but does not contemplate a cost contingency for environmental testing, abatement, or monitoring.

ANTICIPATED NEXT STEPS

TEC recommends that the School Department select one or both sites to further explore with the various Town Departments, Boards and Commissions. Additionally, it would be beneficial to conduct neighborhood meetings to discuss potential plans with residents that live in close proximity to the project sites, to gather important comments from stakeholders that may be directly impacted by the facility for incorporation into a detailed design package. The School Department should further evaluate and discuss the results of these more detailed discussions to determine the proposed location to construct the bus parking facility.

Once the School Department selects a preferred location, an existing conditions and property line survey should be performed to support the design, permitting, and construction efforts. A Wetlands Scientist should be consulted to determine any areas that may be protected under the Wetlands Protection Act and Town of Wayland Conservation Commission Bylaws. Following the existing conditions survey, the design and permitting process can commence. TEC anticipates local approval from the Town of Wayland Planning Board and Conservation Commission due to Site Plan Approval and the need for stormwater management.

OTHER CONSIDERATIONS

Design, permitting and construction documents are anticipated to be similar with each alternative. It is anticipated that the following items will be required to support the design, permitting and construction documents:

- Existing Conditions Survey
- Wetlands Consultant
- Environmental / Hazardous Materials Consultant (Potential)
- Site Plan Package
- Stormwater Management Report
- Test pits for Stormwater Management design
- Traffic Memorandum
- Meetings & Public Hearings
- Construction Plans
- Construction Specifications
- Bid Document Support

Fees associated with the design, permitting and construction document preparation are anticipated to range from approximately \$60,000 to \$80,000, excluding environmental services. The design development process will require approximately four to six months following authorization.

Further review and permitting may be required depending on other parameters identified during the design and permitting process, including, a Notice of Intent, Historic and Archaeological reviews. Additionally, coordination will be required with the MassDEP and the Town of Wayland Board of Health for the Middle School property due to the previous landfilling activities. If this site is selected, TEC or the Town will need to retain a consultant with expertise in landfill permitting and the sampling and handling of potentially hazardous materials. Costs and scheduling implications associated with these services have not been included as they can vary substantially.

TEC recommends that the School Committee request \$600,000 to implement a relocated bus parking facility at either location. This allows for potential alternatives to be considered at each facility and allow for increased construction costs related to potential changes in the scope of the project.

Please do not hesitate to contact us at (978) 794-1792 with any questions regarding our assessment and recommendations. Thank you for your consideration.

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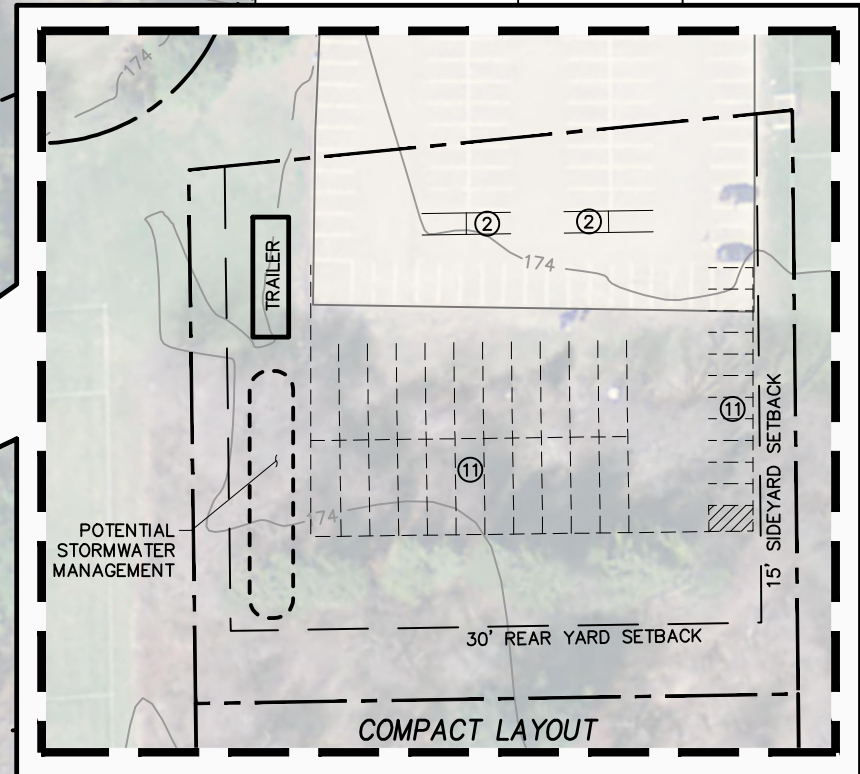
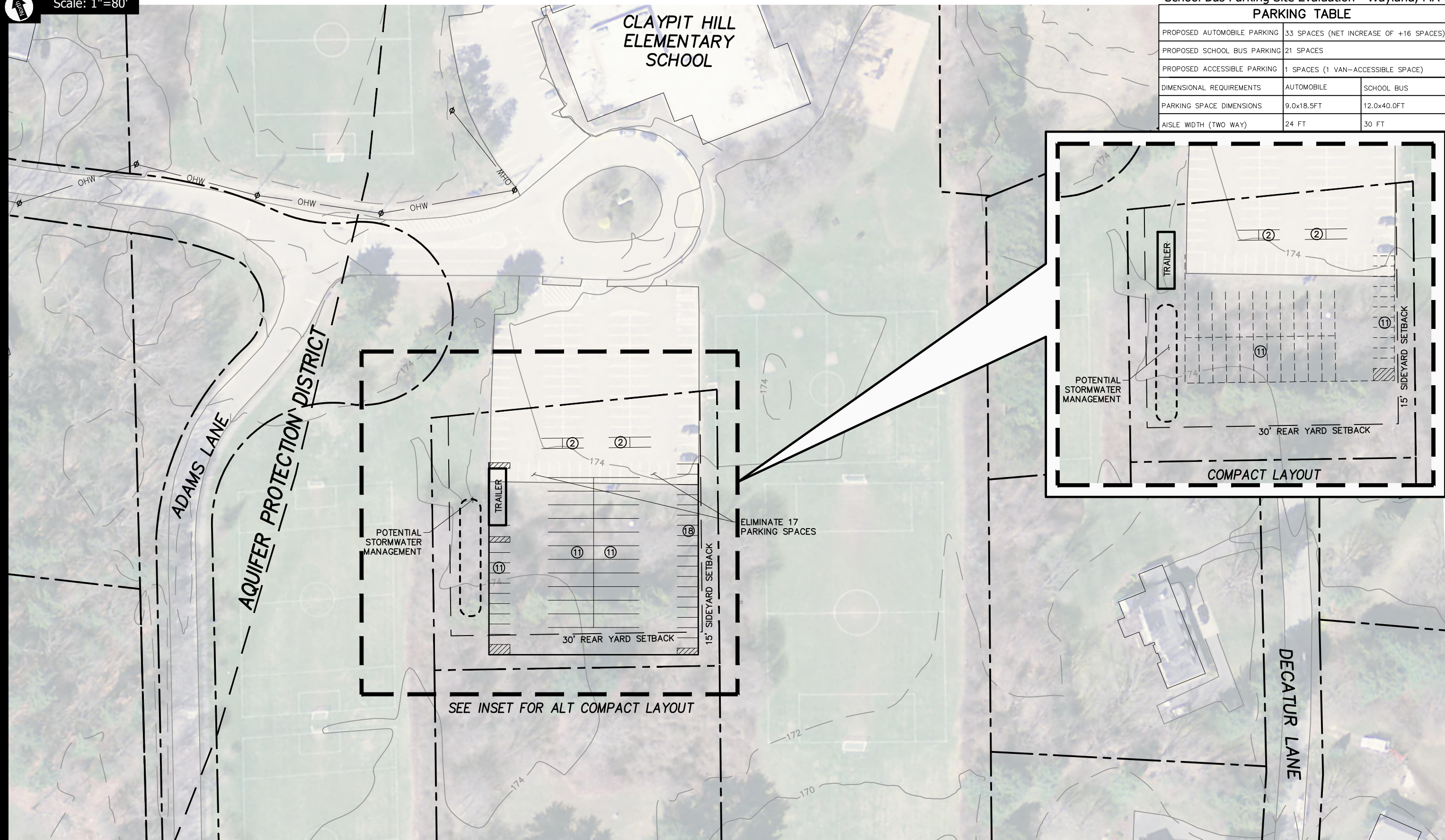


Scale: 1"=80'

School Bus Parking Site Evaluation - Wayland, MA

PARKING TABLE

PROPOSED AUTOMOBILE PARKING	33 SPACES (NET INCREASE OF +16 SPACES)	
PROPOSED SCHOOL BUS PARKING	21 SPACES	
PROPOSED ACCESSIBLE PARKING	1 SPACES (1 VAN-ACCESSIBLE SPACE)	
DIMENSIONAL REQUIREMENTS	AUTOMOBILE	SCHOOL BUS
PARKING SPACE DIMENSIONS	9.0x18.5FT	12.0x40.0FT
AISE WIDTH (TWO WAY)	24 FT	30 FT



TEC, Inc.

NOTE:
THIS CONCEPTUAL LAYOUT PROVIDES A GENERAL CONCEPT
INCORPORATING THE REQUESTED PARAMETERS FOR THE BUS PARKING
FACILITY. VARIOUS CONFIGURATIONS OF BUS ROUTING AND PARKING CAN
BE INCORPORATED. FINAL CONFIGURATIONS CAN BE COORDINATED WITH
THE TOWN AND FACILITIES MANAGER DURING FINAL DESIGN.

Figure 2

Concept 2 - Parcel ID: 19-072A
86 Claypit Hill Road, Wayland, MA
January 6, 2017

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Scale: 1"=80'

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Figure 5

Concept 5 - Parcel ID: 47D-058B
Wayland Middle School
201 Main Street, Wayland, MA
January 6, 2017

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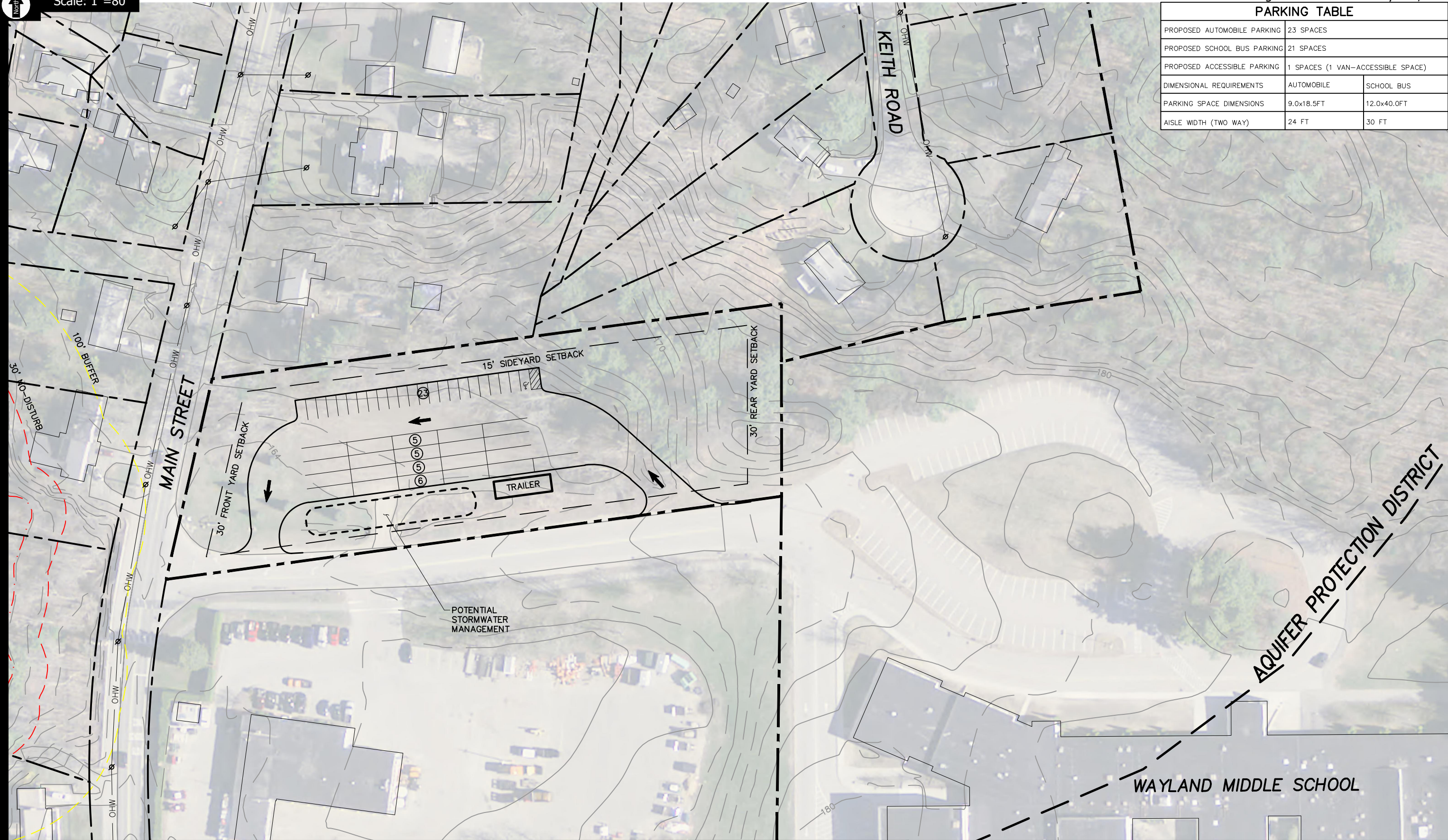


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School Bus Parking Site Evaluation - Wayland, MA

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Figure 1

Concept 5A - Parcel ID: 47D-058C
201 Main Street, Wayland, MA
January 17, 2017