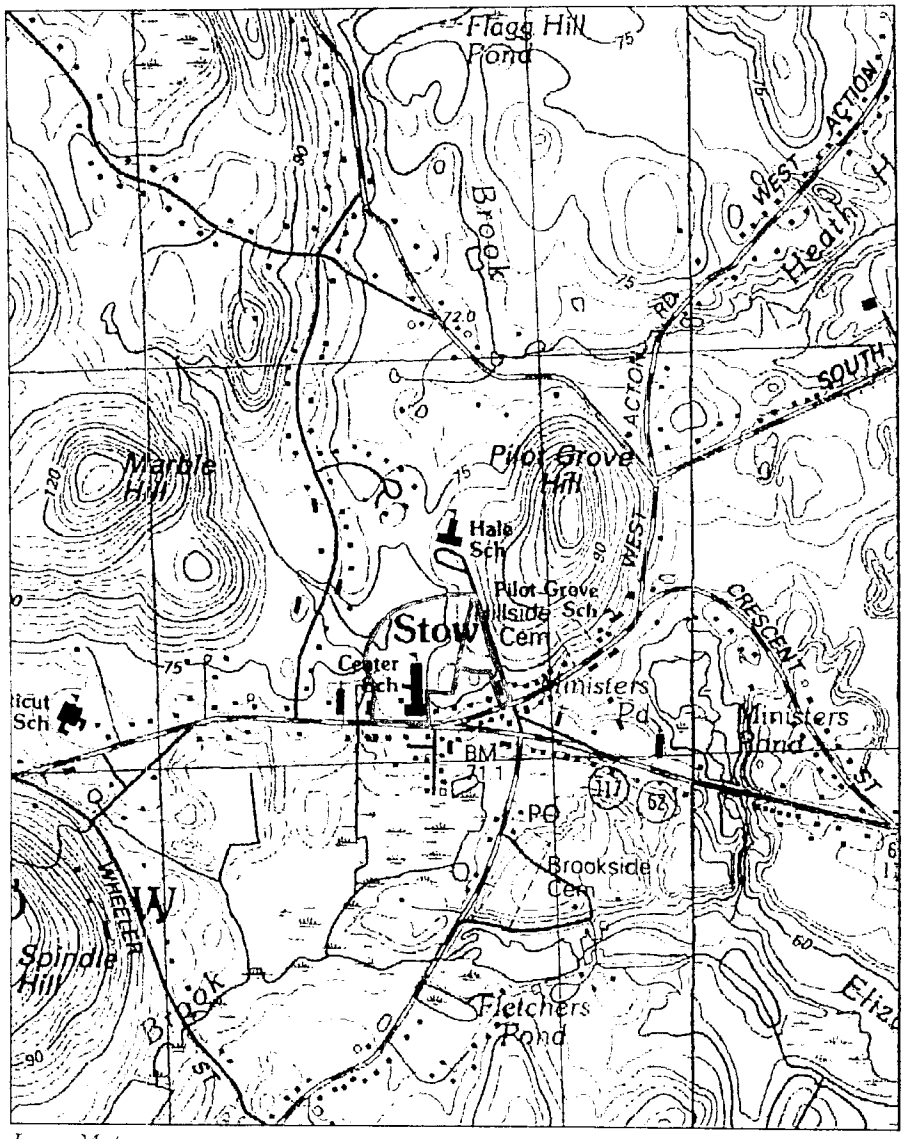
EXHIBIT E
PROJECT SITE
NASHOBA REGIONAL SCHOOL DISTRICT

EXISTING BUILDING CONDITIONS



Locus Map

Pompositticut Elementary School is an open plan concept school built in 1973 with no exterior classrooms except for six 760 square foot spaces formerly used as amphitheatres. It houses the K – 2 population. The building has a design capacity of approximately 214 students. It currently has 292 students, but has no room for the pre kindergarten students, has four modular classrooms, and has limited program space for art, music, physical education, health, and foreign language.

Center Elementary School was originally built in 1954 with additions in 1956 and 1958. It is structurally sound, but has no expansion room for increasing enrollment. The building has a design capacity of approximately 360 students. It currently has 297 students. Program space is at a premium as well, forcing the school to use an exterior building known as the "Stone building" which is a former apple barn that has been remodeled for a variety of uses over the years. This school houses grades 3 -5 for the Town of Stow.

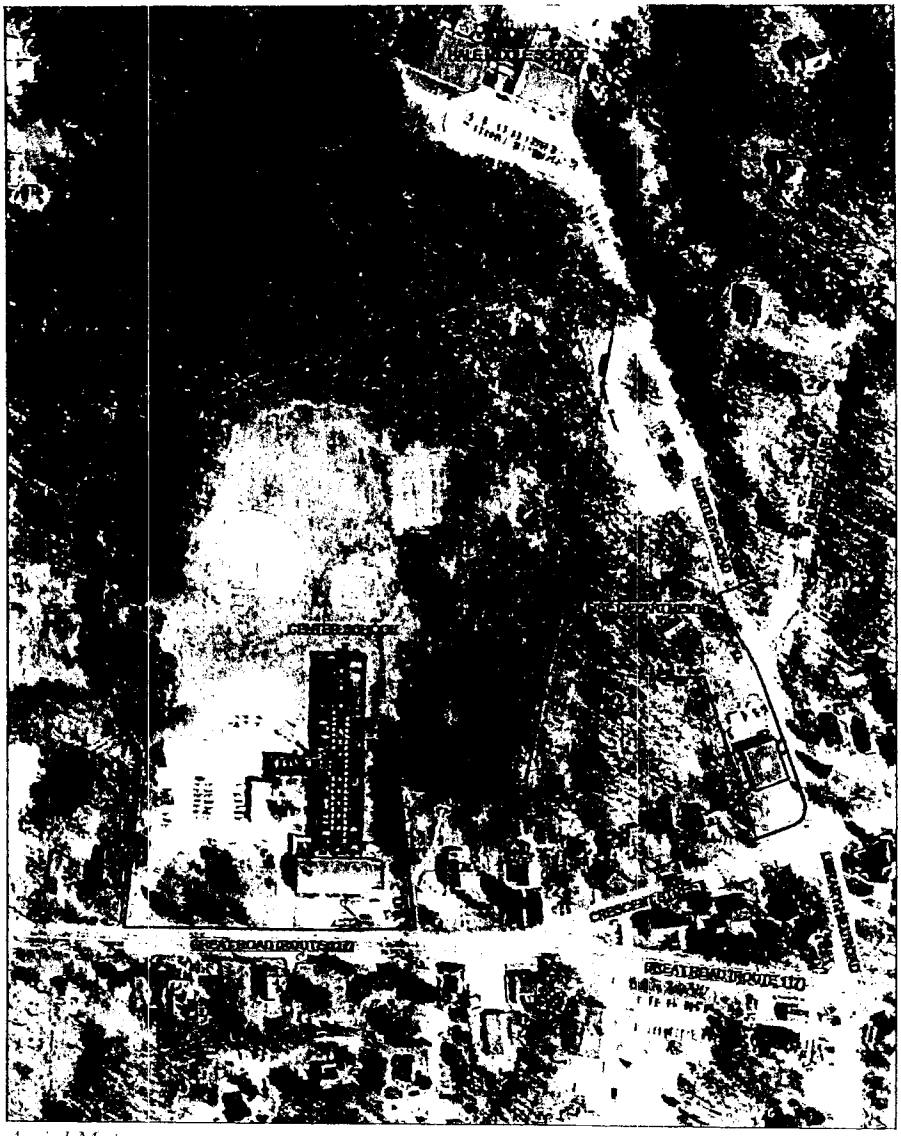
EXISTING SITE CONDITIONS

The existing Center School site measures approximately 15 acres and is located at 403 Great Road in Stow, Massachusetts. The site is bordered to the south and west by residential properties, to the east by the Town of Stow Fire Department and to the north by the Hale Middle School.

The site consists of the existing school building with associated parking and circulation accessed from Great Road. The remaining portion of the site consists of existing ballfields, a playground and two tennis courts north of the existing building. A perimeter wetland is located along the north and west edges of the property and includes a small "finger" wetland that extends into the middle of the site behind the existing tennis courts.

The Project also includes the development of a portion of the Stow Fire Department property to the east (approximately 3 acres) for secondary access to the site, staff parking and the new wastewater leaching field. The 3 acres of Fire Department property consists primarily of undeveloped wooded upland and an existing gravel bus staging area. The 3 acres of land will ultimately be turned over the school department.

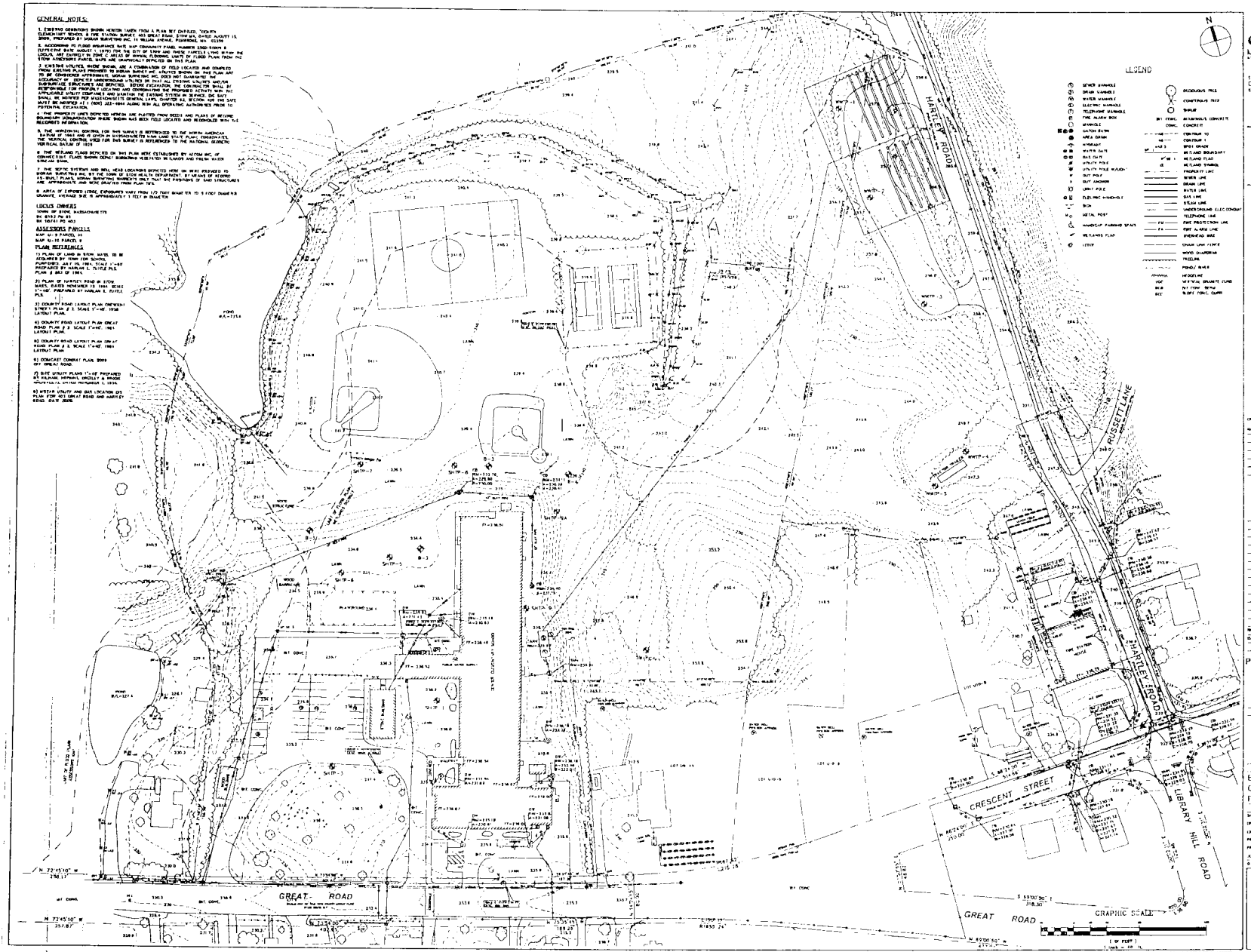
The site currently includes a dedicated domestic water supply well, located in the basement of the existing school and a dedicated subsurface wastewater disposal system consisting of a septic tank and pump station adjacent to the existing building and disposal field located along Hartley Road. Both the existing well and septic system will be upgraded for this project.



Aerial Map

ENROLLMENT PROJECTIONS

On April 10, 2009 the MSBA and the District conducted a conference call to review the enrollment projections for the Stow Pompositticut and Center Elementary Schools. The MSBA then developed their projections for the Stow Elementary Schools community. The MSBA projections indicate a relatively stable elementary school population through 2017.



SMMA
STEPHEN MUNRO & MULLER ASSOCIATES

1030 Massachusetts Avenue
Cambridge, Massachusetts 02138
617.547.5400 Fax 617.354.3734

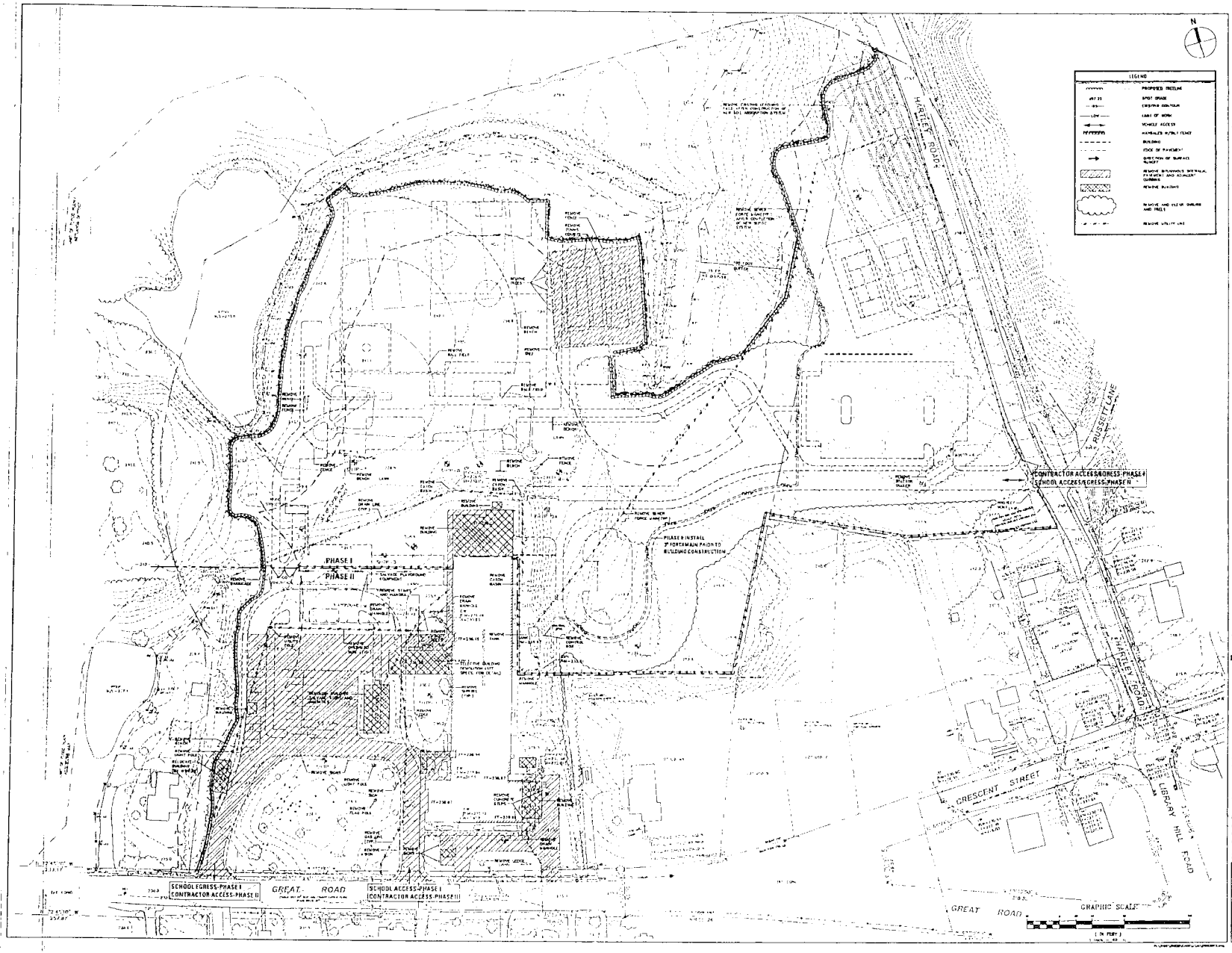
HORIUCHI SOLIEN
LANDSCAPE ARCHITECTS

Pompositticut / Center Elementary School

403 Great Road
Stow, MA 01775

EXISTING CONDITIONS PLAN

C1.01



SMMA
1000 Massachusetts Avenue
Cambridge, Massachusetts 02138
617.547.5400 fax 617.354.5136

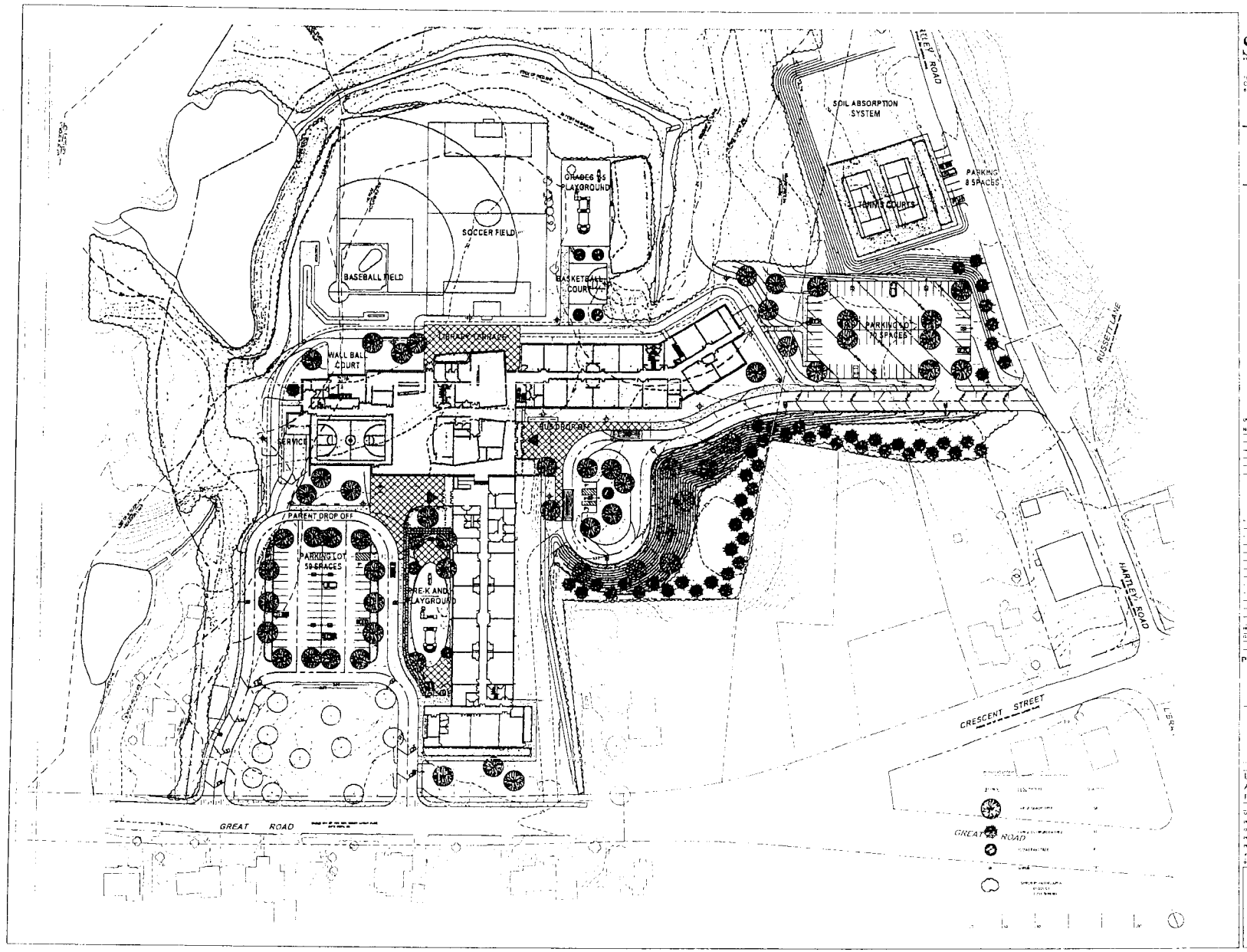
HORIUCHI SOJEN
LANDSCAPE ARCHITECTS

Pompositticut / Center Elementary School

401 Great Road
Stow, MA 01775

SITE PREPARATION PLAN

C2.01



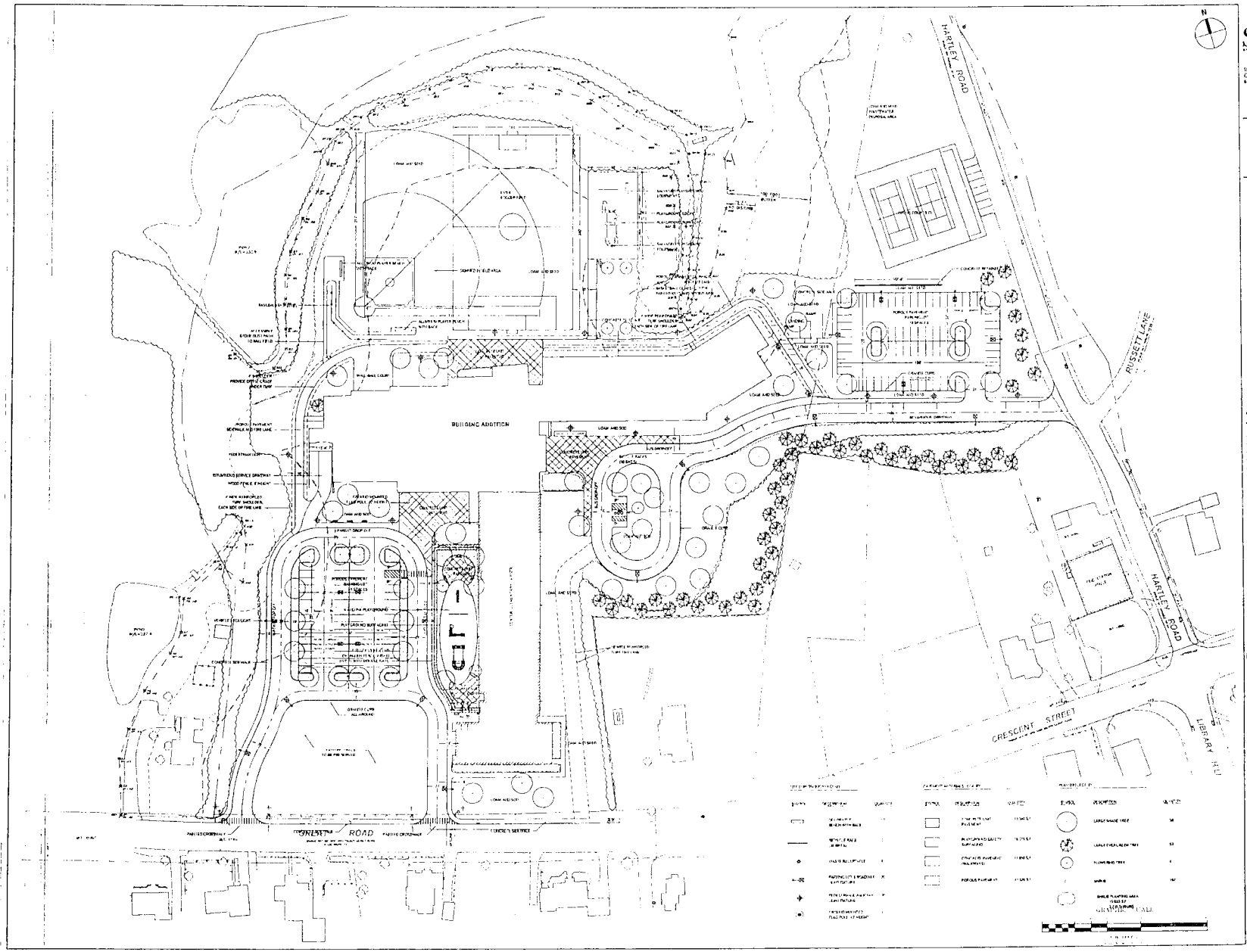
SMMA

HOBUCHI LE SOUEN LANDSCAPE ARCHITECTS

Pompositticut / Center Elementary School

LAYOUT AND MATERIALS PLAN

G3.01



SMMA

1000 Massachusetts Avenue
Cambridge, Massachusetts 02138
617.547.5100 Fax 617.234.3118

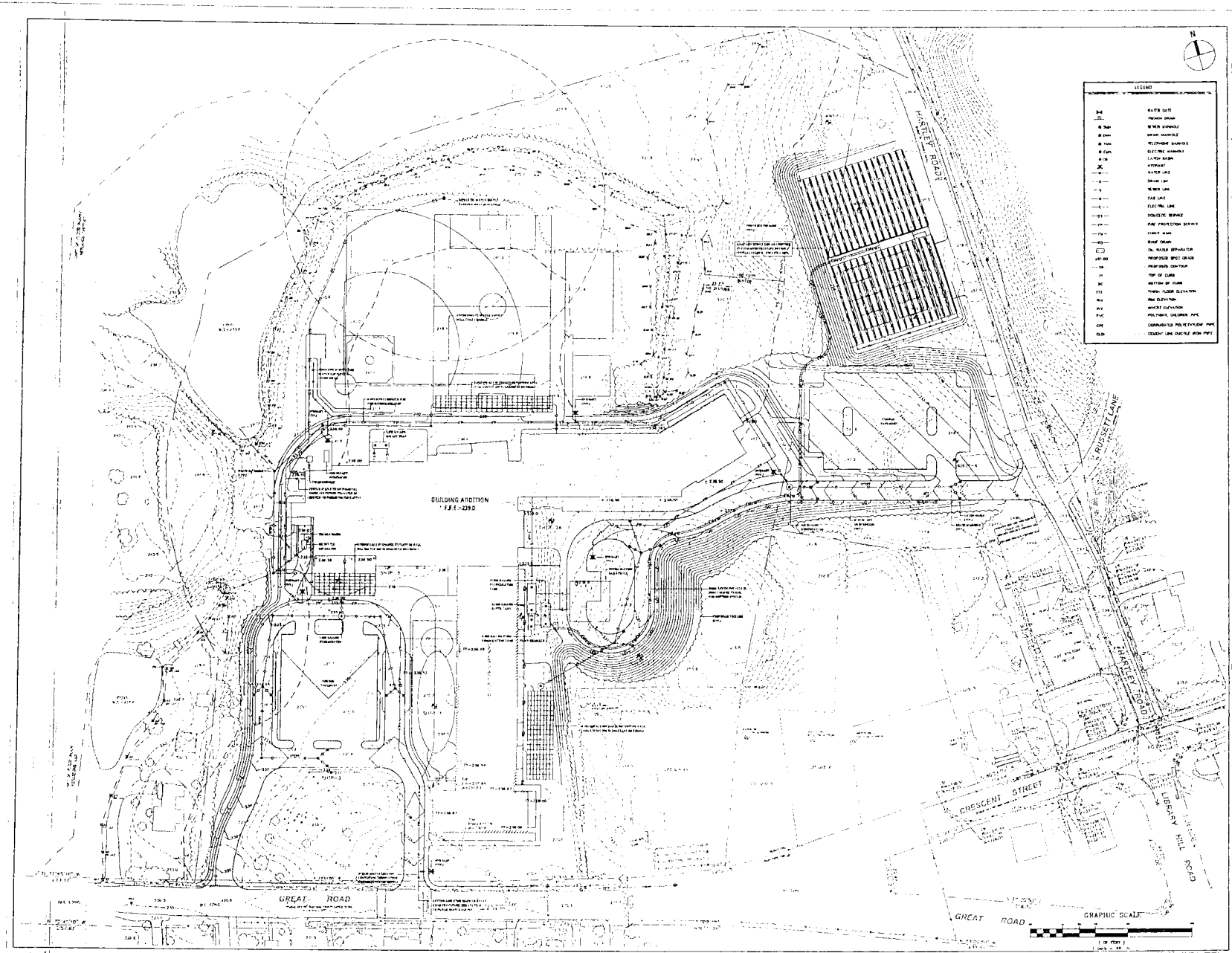
HORIUCHI SOLIEN LANDSCAPE ARCHITECTS

Pompositticut / Center Elementary School

403 Great Road
Stow, MA 01775

LAYOUT & MATERIALS PLAN

C3.01



SMMA

1000 Massachusetts Avenue
Cambridge, Massachusetts 02138
617.547.5400 Fax 617.354.8136

HORTICULTURE SOUEN-
LANDSCAPE ARCHITECTS

Pompositticut / Center Elementary School

403 Great Road
Stow, MA 01775

GRADING & UTILITIES PLAN

C4.01

TABLE OF CONTENTS

1.0 INTRODUCTION

The following report presents the results of an environmental site assessment of 403 Great Road in Stow, Massachusetts, which is occupied by Center School, an elementary school. This report was prepared by ADS Environmental Engineering, LLC (ADS) in accordance with our proposal dated April 23, 2009, and the Limitations contained in Appendix A. The objective of this study is to render a professional opinion as to the potential presence of oil or hazardous material in the environment of the site with respect to Massachusetts General Laws, Chapter 21E and the Massachusetts Contingency Plan (MCP), 310 CMR 40.0000. This report was prepared in general accordance with ASTM E1527-05 Standard Practice for Environmental Site Assessments.

Studies conducted specifically for this site assessment included a site reconnaissance to visually assess conditions at the property, a review of readily available town and state regulatory agency files, and an environmental computer database search. A subsurface exploration program designed to assess the property for geotechnical engineering design purposes was observed on a part-time basis by ADS in order to view subsurface conditions and collect soil samples for analytical testing.

2.0 SITE DESCRIPTION

The subject property is 403 Great Road (Route 117) in Stow, Massachusetts, and consists of a 14.9 acre parcel of land developed with the Center School and associated parking, outbuildings, playing fields, as well as wooded area. The Center School currently services grades 3, 4 and 5, and was constructed in 1955. The property is identified on Stow Assessor's Map U-9, Parcel 44. Additional land adjacent to Hartley Road was included in the assessment since this is where the existing school's septic system leachfield is located, and where proposed future wastewater disposal may be located. A Locus Plan and Exploration Location Plan showing the studied area are provided as Figures 1 and 2, respectively.

The approximate location of the property on the United States Geologic Survey (USGS) Hudson, Massachusetts Quadrangle is Latitude 42°26'15" North and Longitude 71°30'30" West. Universal Transverse Mercator (UTM) coordinates for the property are approximately 4,701,402 meters North and 706,320 meters East.

2.1 Site Reconnaissance

On June 22, 2009 ADS visited the subject property to conduct a reconnaissance with respect to surficial evidence of oil and/or hazardous material in the environment of the subject property. ADS toured the property with Mr. Greg Irvine, Principal of the school. Mr. Corky Tindall, Head Custodian, was present for a portion of the tour, and ADS later interviewed Mr. William Spratt, Director of Facilities, to gather additional information.

3.2 GEOTECHNICAL AND SOILS EXPLORATION

Detailed geotechnical and soils explorations were completed on the Center Elementary School site and adjacent Fire Department property to establish engineering design criteria Project. The subsurface exploration program included a series of test borings and test pits within the proposed building addition and surrounding site development areas. Additional Title V testing was performed including preliminary percolation tests to determine the design criteria for the proposed septic system upgrades.

The details of the finding are defined in the following report by Sanborn Head Associates dated August 27, 2009.

SANBORN, HEAD & ASSOCIATES, INC.
1 Technology Park Drive · Westford, MA 01886
P (978) 392-0900 · F (978) 392-0987
www.sanbornhead.com

IMPROVING EARTH

August 27, 2009
File No. 3048.00

Mr. James Warren
Symmes, Maini & McKee Associates, Inc.
1000 Massachusetts Avenue
Cambridge, MA 02138

Re: Geotechnical Engineering Design Memorandum
Stow Center Elementary School
Nashoba Regional School District
Stow, Massachusetts

Dear James:

Sanborn, Head & Associates, Inc. (SHA) has prepared this design memorandum for the proposed expansion of the Stow Center Elementary School in Stow, MA to support the Schematic Design (SD) site plans and cost estimates being prepared by Symmes, Maini & McKee Associates, Inc. (SMMA). This memorandum addresses the conceptual design of building foundation systems, the wastewater leaching field, the drinking water supply well, and an evaluation of significant cost items for the site work such as excavation and replacement of unsuitable materials and bedrock excavation.

The school is located along Great Road (Route 117) in Stow Center as shown on the Locus Plan on Figure 1. The proposed building addition and site improvements are shown on Figure 2 which was adapted from the Grading and Utilities Plan prepared by SMMA dated August 19, 2009 and provided to SHA on August 24, 2009.

SUBSURFACE EXPLORATIONS

To obtain baseline subsurface information to support the schematic design, SHA has performed the following subsurface explorations to date:

- Four test borings (B-1 through B-4W) that were drilled to depths between 13 and 22 feet in the proposed building addition area. Split spoon soil samples were collected and Standard Penetration Tests (SPTs) were performed to evaluate the in-situ density of the existing soils.

- One groundwater observation well was installed in boring B-4W. The construction details are provided on the attached log for B-4W.

- Nine geotechnical test pits (SHTP-1 through SHTP-9A) that were excavated in the vicinity of the proposed building addition and parking areas. Please note that test pit SHTP-4 was not performed.

- Three hydraulic conductivity tests were performed adjacent to test pits SHTP-1, SHTP-3 and SHTP-9A using the falling head permeameter test method (ASTM D5126) as outlined in the DEP Stormwater Handbook.

- Five wastewater test pits (WWTP-1 through WWTP-5) that were excavated to evaluate soil conditions in potential locations for a reconstructed wastewater leaching field.

- Two percolation tests adjacent to test pits WWTP-2 and WWTP-3 to obtain data regarding soil infiltration rates for preliminary design of the wastewater leaching field. The wastewater test pits and percolation tests were completed as "unofficial" tests to provide preliminary data for schematic design that were not witnessed by the local Board of Health. Additional "official" test pits and percolation tests will be completed during the Design Development phase that will be witnessed by the local Board of Health.

SHA monitored the subsurface explorations on a full-time basis and logs of the test borings, test pits and percolation tests prepared by SHA are attached. The approximate locations of the subsurface explorations are provided on Figure 2. The locations of the B-series borings and SHTP-series test pits were surveyed after exploration work by Moran Surveying, Inc. of Pembroke, MA and are shown in their correct locations on the Existing Conditions Plan and Figure 2. Moran Surveying also surveyed locations staked in the field by SHA prior to excavation of the WWTP-series wastewater test pits. However, the actual locations of the WWTP-series test pits were modified by SHA at the time of excavation to avoid existing utilities and for equipment access. The approximate locations of the completed WWTP-series test pits are shown on Figure 2 based on tape measurements by SHA from existing site features.

EARTHWORK FOR SITE MODIFICATIONS

In general, the subsurface conditions in the lowland areas in the east-central portion of the site include topsoil and subsoil containing roots, overlying loose silty sand fill material containing cobbles and boulders overlying natural medium dense to dense sand and gravel. In the upland areas of the site to the northeast and east of the existing school building, the conditions typically consist of dense to very dense glacial till containing boulders overlying bedrock.

The subsurface explorations indicate that the site work will include removal of unsuitable materials in the proposed building addition area using "excavate and replace" methods, and that some bedrock excavation may be necessary for proposed paved areas to the east of the existing school building. We suggest that allowances be provided in the SD cost estimates for the following work.

Unsuitable Materials in Proposed Building Addition Area

The subsurface explorations indicate that the northwestern portion of the proposed building addition area includes loose fill material approximately 5 to 7.5 feet thick that should be considered unsuitable for foundation support. Likewise, the remainder of the proposed building area includes approximately 1 to 3 feet of surface topsoil and subsoil that should be considered unsuitable material and removed from the building area prior to placing compacted fill material. The approximate limits and observed depth of unsuitable materials in the proposed building addition area are shown on Figure 2.

An existing conditions plan provided to us by SMMA indicates the presence of two buried utilities beneath the proposed building footprint: a 6-inch clay drainage pipe running from the northeast corner of the existing school to an outlet approximately 300 feet west of the school, and a 3-inch sewer force main from the school's septic tank to the current leach field located beneath the existing bus turnaround area along Hartley Road. We recommend that these utilities be relocated as appropriate to areas outside the proposed building footprint, and any abandoned utilities located beneath the building footprint should be excavated and replaced with compacted fill, or capped and filled with flowable fill.

Bedrock Excavation

Bedrock excavation may be necessary to install subsurface utilities and construct the proposed pavement area to the east of the existing school building. Figure 2 shows the estimated limits of the potential bedrock excavation area based on the limited subsurface data available at this time. Additional subsurface explorations are needed during Design Development to better define the extent of bedrock excavation required. An underdrain may be required at the toe of the cut slope to collect groundwater that may exist on the bedrock surface during wet periods of the year.

Groundwater Control

Groundwater was encountered at an approximate elevation of 240 feet at WWTP-4 and WWTP-5. Therefore, it may be necessary to raise the final grade in the area of proposed porous pavement to the east of the building and provide slope protection (e.g., rip rap) on cut slopes to mitigate potential erosion from groundwater seepage. Additional subsurface explorations are recommended in this area of the site as part of design development.

HYDRAULIC CONDUCTIVITY TESTS FOR STORMWATER DESIGN

Field tests were performed during the geotechnical test pit explorations to estimate the saturated hydraulic conductivity of the site soils. The locations of proposed stormwater infiltration were not known at the time of the test pit excavation so three locations were selected that were generally representative of site soils. The hydraulic conductivity tests were performed using the falling head permeameter test method (ASTM D5126) as outlined in the DEP Stormwater Handbook. The tests were performed at locations adjacent to test pits SHTP-1, SHTP-3 and SHTP-9A. Results of the testing are summarized in Table 1.

Table 1
Hydraulic Conductivity Test Results

Test Pit Location	Depth of Test	Soil Tested	Measured Hydraulic Conductivity, ft./day
SHTP-1	2.0 ft.	Sand & Gravel	12
SHTP-3	3.1 ft.	Glacial Till	16
SHTP-9A	2.5 ft.	Glacial Till	6

FOUNDATION DESIGN FOR BUILDING ADDITION

We believe that the proposed building addition can be designed with conventional spread footings and a ground level slab-on-grade. This assumes that the unsuitable materials are removed to expose undisturbed natural soils and the area is backfilled with compacted Structural Fill. Stabilized groundwater level measurements in observation well B-4W indicate the groundwater elevation is approximately elevation 230 feet compared to the proposed finished floor elevation of 239 feet. As such, we believe that it will not be necessary to install foundation drains or subslab underdrains in the proposed building area. Additional subsurface explorations are recommended during the Design Development phase to support geotechnical engineering and to provide information needed by contractors to bid the project. Additional recommendations regarding foundation design and earthwork procedures for subgrade preparation will be provided in the geotechnical engineeing report during the Design Development phase.

WASTEWATER LEACHING FIELD

Records indicate that the existing wastewater leaching field for the Center School was constructed during the 1950s and does not meet the design criteria in the current Title V regulations. It is understood that the existing leaching field will need to be replaced with a new leaching field designed and constructed in accordance with current regulations as part of the school expansion. The proposed site plan calls for reconstruction of a new leaching field in the approximate area of the existing leaching field which will result in the need for phased construction of the new leaching field to maintain an active wastewaster disposal field during construction. We understand that the wastewater design flow rate for the leaching field for the expanded school may be on the order of 6,300 gallons per day.

Test pits WWTP-2 and WWTP-3 indicate that the receiving layer soils consist of relatively low permeability glacial till soil. Two percolation tests performed in these soils resulted in percolation rates of 15 and 30 minutes per inch. Title V regulations require that leaching fields be sized based on the slowest percolation rate in the proposed disposal area. The estimated depth

to seasonal high groundwater ranged from 40 to 48 inches below the existing ground surface based field observation of redoximorphic features (soil mottling) in the test pits.

Natural sand soils with higher hydraulic capacity were encountered below surface fill material consisting of soil and large boulders in test pits WWTP-4 and WWTP-5 adjacent to Hartley Road to the south of the existing leaching field. Advantages to this location include the ability to construct the new leaching field while maintaining the existing leaching field without the need for phased construction, and more permeable receiving layer soils which will result in a smaller leaching field. Disadvantages include the need to remove the existing fill deposit containing large boulders, shallow groundwater which will result in the need to construct a "raised system" using imported Title V sand, and proximity to four existing water supply wells serving private residences on Great Road and the Fire Station. If the additional exploration work and percolation tests indicate the location currently proposed for the new leaching field may not be feasible, the area in the vicinity of WWTP-4 and WWTP-5 could be considered as an alternate location for the wastewater leaching field.

DRINKING WATER SUPPLY WELL LOCATION

We understand that drinking water for the existing school is provided by a bedrock well located inside the existing school building. As part of the school expansion project, a new water supply well is required to comply with current state regulations. We understand that the permitted withdrawal rate for the new well may range from approximately 5,000 to 7,000 gallons per day which will result in a Zone I wellhead protection radius in the range of approximately 200 to 225 feet.

A preliminary location for the new water supply well is shown on Figure 2. This location results in the Zone I wellhead protection area being located entirely on property owned by the Town of Stow (Center School and Hale School property) which is a state requirement for siting of the public water supply well. Land use within the Zone I and the final location of the water supply well will be discussed with MassDEP during permitting of the public water supply well during the Design Development phase. It has been our experience that land use consisting of athletic fields and impermeable or synthetic surfaces are not allowed in the Zone I of public drinking water wells. Therefore, it may be necessary to shift the location of the well to the north on to the Hale School property so that the proposed athletic fields and playground are not located with the Zone I area.

At this time for preliminary cost estimates, we suggest that you assume that a bedrock water supply well on the order of 300 feet deep will be required. This will simplify permitting, pump test requirements, and water quality monitoring compared to a shallow overburden well in the sand and gravel in the western portion of the site due to the presence of the nearby surface water pond, and developed land use in the vicinity of the proposed well.

We trust this memorandum meets the needs of the project at this time. If you have any questions, please call.

Very truly yours,
SANBORN, HEAD & ASSOCIATES, INC.

Jackson B. Hewlett
Project Engineer

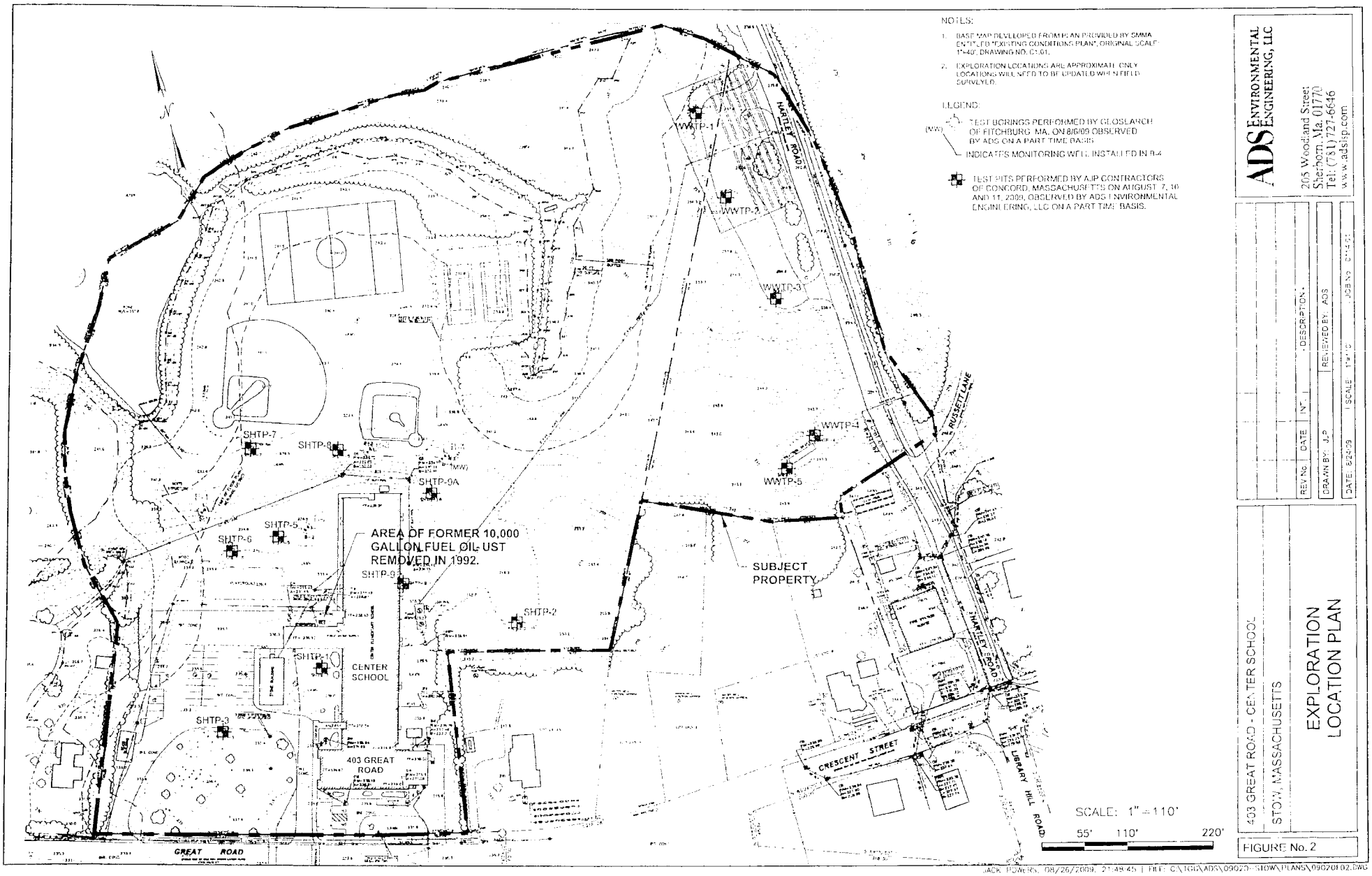
Gregory A. Mischel, P.E.
Senior Project Manager

Vernon R. Kokosa, P.E.
Principal

JBH/GRM/VRK/:jbh

Encl. Figure 1 – Locus Plan
Figure 2 – Exploration Location Plan
Exploration Logs
Percolation Test Summary Table

S:\WESDATA\3000\3048.00\Originals\20090826 Stow School Design Memo-Final.docx



ADS Environmental Engineering, LLC
205 Woodland Street
Sherborn, Ma. 01770
Tel: (781) 727-6646
www.adsllp.com

REV No.	DATE	DESCRIPTION
DRAWN BY: JJP		REVIEWED BY: ADS
DATE: 8/24/09	SCALE: 1"=110'	JOB No. 090201

403 GREAT ROAD - CENTER SCHOOL
STOW, MASSACHUSETTS

EXPLORATION LOCATION PLAN

FIGURE No. 2

JACK POWERS, 08/26/2009, 21:48:45 | FILE: C:\TGG\ADS\090201-STOW\PLANS\090201 02.DWG