PLAN

SCALE: 1"=100'

VERNAL POOL ANALYSIS		
EXISTING DEVELOPED AREA WITHIN 100-750 FEET FROM VERNAL POOL	11.6	ACRES
TOTAL AREA BETWEEN 100 FEET - 750 FEET FROM VERNAL POOL	42.3	ACRES
EXISTING PERCENT DEVELOPED WITHIN 100-750 FEET FROM VERNAL POOL	27%	
PROPOSED DEVELOPED AREA	6.2	ACRES
TOTAL DEVELOPED AREA BETWEEN 100-750	17.8	ACRES
PROPOSED DEVELOPED AREA PERCENTAGE	42%	
INCREASE IN DEVELOPED AREA, %	15%	

SAND HILL ESTATES
1040 MAIN STREET
GLASTONBURY, CT

VERNAL POOL ANALYSIS

OWNER/APPLICANT:
CARRIER CONSTRUCTION INC
PO BOX 1842
BRISTOL, CT 06010-1842

SITE LOCATION:
1040 MAIN STREET
ASSESSOR'S MAP E10 STREET 4140 LOT E0129B
GLASTONBURY, CT

WOLFF ENGINEERING
CIVIL & STRUCTURAL ENGINEERING
CORNERSTONE PROFESSIONAL PARK, SUITE C101
39 SHERMAN HILL ROAD, WOODBURY, CT 06798
TEL.: 203.263.7447 FAX: 203.263.0060

REVISIONS:

PLOT DATE: 4/5/2021

STATE OF CONNECTICUT · RONALD P. WOLFF · No. 19998 · LICENSED PROFESSIONAL ENGINEER

DATE: 1/18/2021
DRAWN BY: R.P.W.
CHECKED BY: R.P.W.
FILE:
FIELD BOOK: R.P.W.
SCALE: AS NOTED
SHEET: 1 OF 12

D:\Ronald Wolff Design\Glastonbury\Main St\#1040\Ustn\1040VernalPoolAnalysis.dgn

Gmail Meghan Hope <mhope@alterpearson.com>

RE: Question regarding 1040 Main Street and St. Augustine

1 message

Father Mark <father@isidoreandmaria.org> Fri, May 21, 2021 at 11:12 AM
To: Meghan Hope <mhope@alterpearson.com>

Hello Meg:

As per our conversation the property at St. Augustine is not for sale at this time. Thank you.

Father Mark

From: Meghan Hope [mailto:mhope@alterpearson.com]
Sent: Thursday, May 20, 2021 1:11 PM
To: father <father@isidoreandmaria.org>; Father Mark Suslenko <suslenko@comcast.net>
Subject: Question regarding 1040 Main Street and St. Augustine

Father Mark: I hope all is well. I am currently working on an 8-lot subdivision application for a client who owns 1040 Main Street, which is a 9.3 acre parcel of land located on the east side of Main Street in South Glastonbury, across from the entrance to Southgate Drive. Please see the attached aerial photo - Main Street is to the west of our site, residential homes are to the north, Town owned open space is to the east and 69 Hopewell Road is to the south which is owned by the Church and currently has the parking lot for St. Augustine's.

We are proposing that our Town road will come directly off of Main Street (second page of the attachment). In order to construct the Town road, we need to meet certain Town standards regarding the dimensions and grade of the road. As the site is very steep in the westerly portion of the site adjacent to Main Street we will need to excavate material from the Site in order to construct the proposed road to meet Town standards. I attended a meeting with the Conservation Commission/Inland Wetlands and Watercourses Agency last week. Some Commissioners were concerned about the excavation needed to construct the road, as some felt the excavation would remove a topographic feature on the Site.

I was asked by Commissioner McClain to investigate an alternative to having the proposed road at Main Street. Specifically, Commissioner McClain wanted me to ask if 69 Hopewell was for sale and/or if the Church would allow us to build a Town road from Hopewell to our Site. The Town would not permit a town road to go through the parking lot, so it would need to be east of the existing parking lot. I outlined this area with a dashed red line on the attachment.

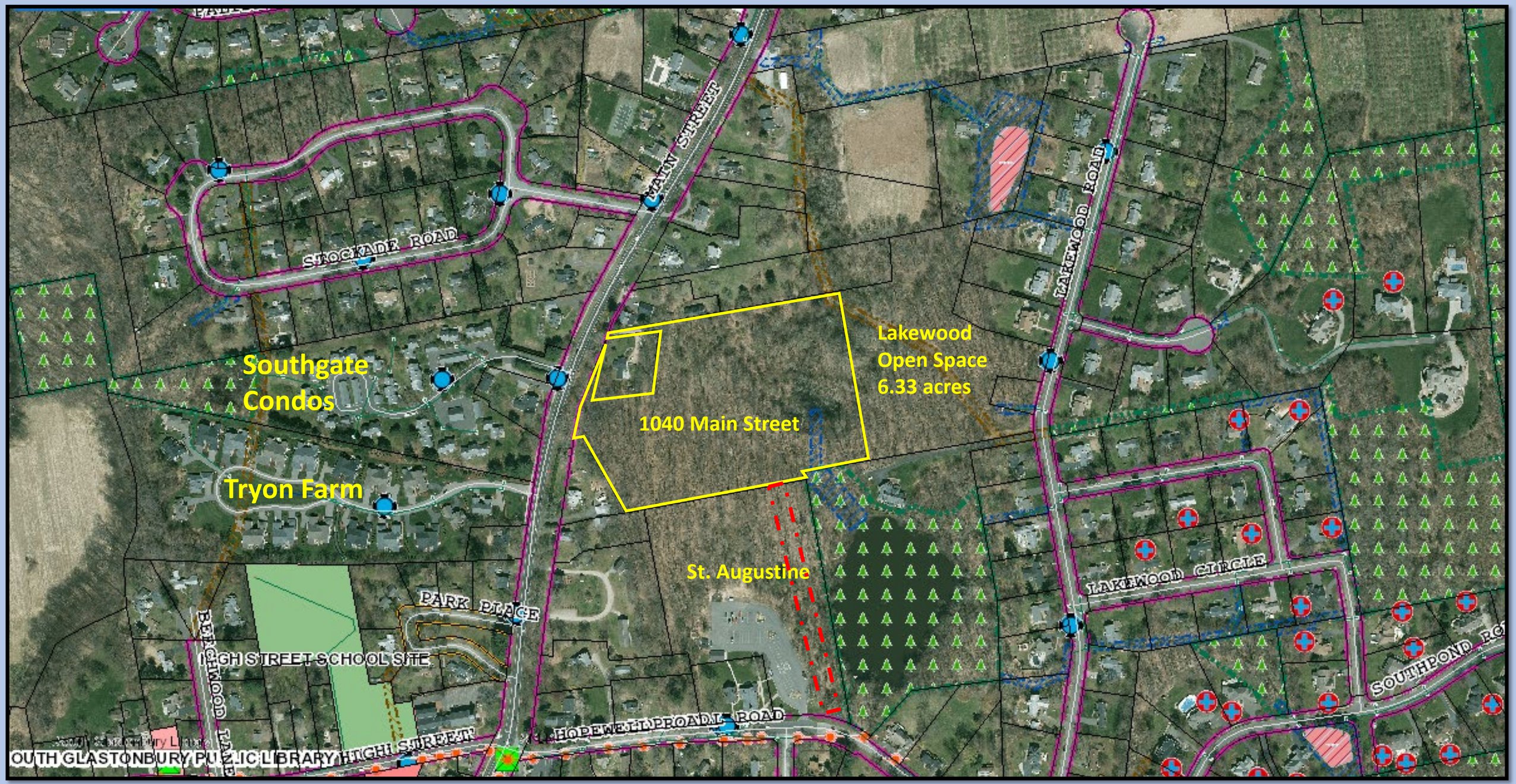
Please feel free to give me a call if you have any additional questions.

Thanks,

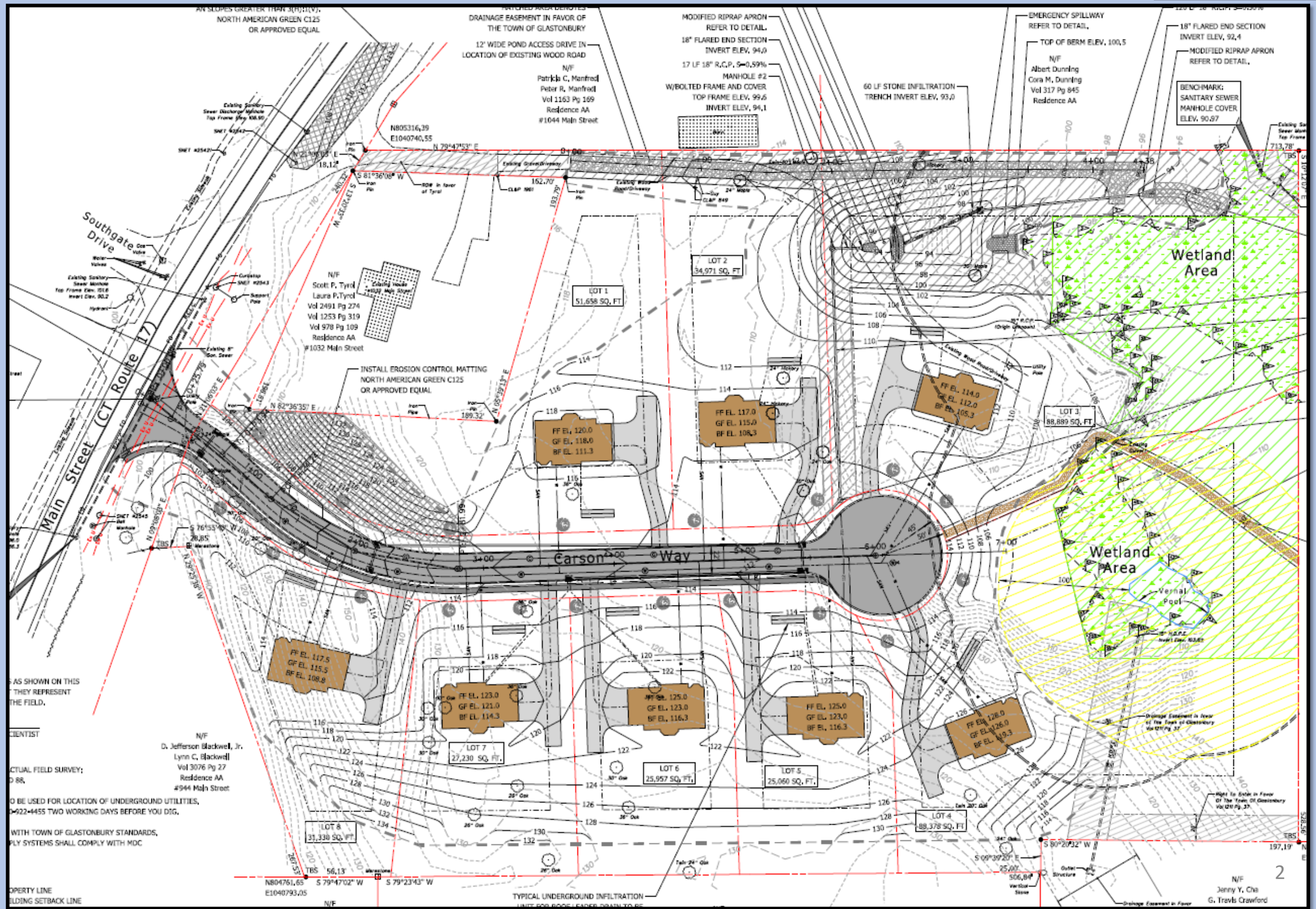
Meg

Meghan Alter Hope

Aerial View of Surrounding Area



Site Development Plan



GEI Consultants

May 21, 2021
Project 2101248.2.1

Gino Carrier
Carrier Construction
161 Birch Street, Suite B
Southington, CT 06489

Consulting
Engineers and
Scientists

Dear Mr. Carrier:

Re: Geologic Assessment
1040 Main Street
South Glastonbury, CT

GEI Consultants, Inc. (GEI) was retained by Carrier Construction to conduct a geologic assessment of the property located at 1040 Main Street, South Glastonbury, CT (Site). The town of Glastonbury has inquired whether a hill located on the western portion of the Site could be an esker. The purpose of our assessment was to determine whether significant geologic features such as an esker, herein after referred to as significant geologic features, are present on the Site.

The town of Glastonbury Subdivision and Resubdivision Regulations, Effective June 1, 1993 and amended May 28, 1996 (Glastonbury, 1996) require that any significant geologic features be depicted on the Site Development Plans (Section 5.7(20)) and Sections 10.7 (Preserving the Integrity of the Area) and 14.0 (Landscaping and Preservation of Existing Resources) require that, if present, significant geological features should be preserved to the greatest extent possible.

Summary of Findings

The evaluation of geologic features on the Site was conducted by Mr. David B. Terry, Professional Geologist (NY and PA), GEI Vice President. Mr. Terry holds a B.A. and an M.S. Degree in Geology and has been practicing in the geosciences as a consultant for 31 years. Mr. Terry's resume is attached in Attachment A.

GEI did not identify any significant geologic features located on the Site as defined by the Glastonbury Subdivision and Resubdivision Regulations. This conclusion, discussed in further detail below, is based on:

- Review of historic aerial photographs.
- Review of historic topographic maps.
- Review of geologic maps.
- A site visit conducted on May 19, 2021 evaluating the geomorphic features (landscape forms) and examination of soils associated with the geomorphic features.

Referenced cited as part of this Assessment are included in Attachment B.

Assessment and Interpretation

Based on the Site topography, two geomorphic features (landscape forms) were evaluated to determine if they may represent eskers or other significant geologic features. These features are shown as Figure 1. Geomorphic Feature 1 is a hill located on the western portion of the Site with a maximum elevation of approximately 150 feet. Geomorphic Feature 2 is a curvilinear hill with a maximum elevation of approximately 130 feet, located adjacent to a wetland and former pond area.

GEI Consultants, Inc.
455 Winding Brook Drive, Suite 201, Glastonbury, CT 06033
860.368.5300 fax: 860.368.5307

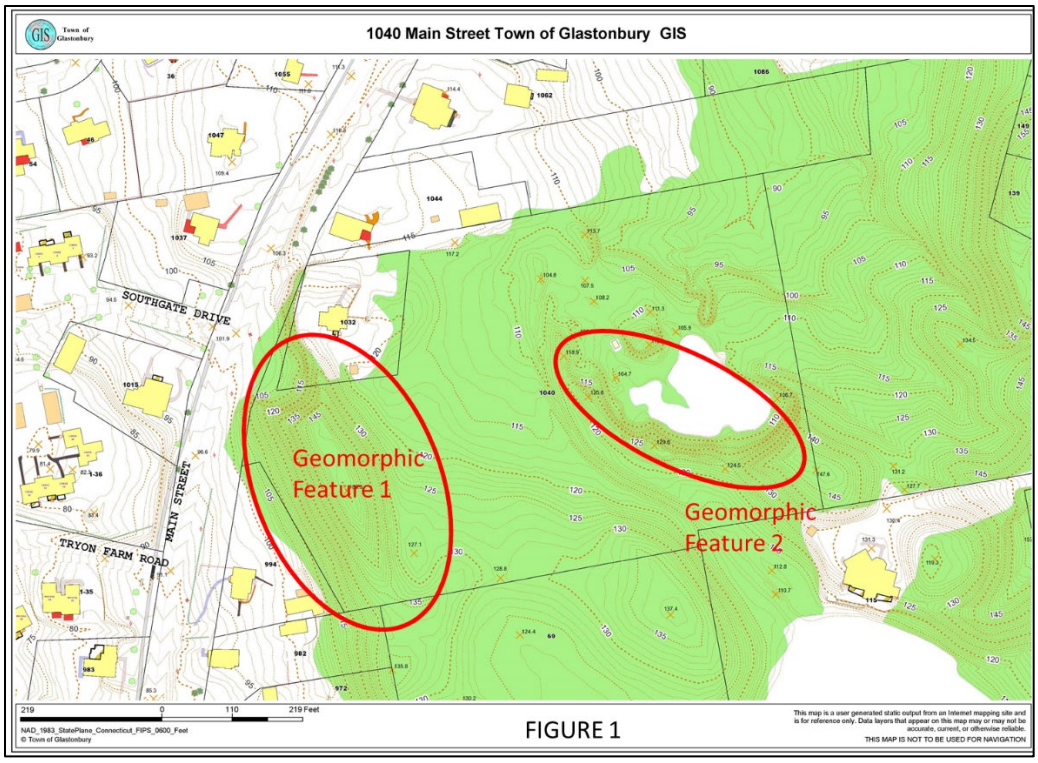


FIGURE 1

Geologic Mapping

The Quaternary Geology of Connecticut (including glacial geology) was most recently mapped and reported by the United States Geological Survey in 2005 (USGS, 2005). Figure 2 presents the mapped glacial geology units surrounding the Site. The surficial geologic unit mapped by USGS at the Site is Dividend Brook deposits (db on the map below). These materials represent successive ice-marginal deltas with a surface altitude of 155-165 feet in the vicinity of the Site. These glacial delta materials (typically sands and gravels) were deposited into a small glacial lake associated with glacial meltwater that temporarily ponded at a slightly higher elevation than glacial Lake Middletown behind the ice-marginal deltas (USGS, 2005).

An ice margin position is depicted by the red line with solid tick marks at the eastern edge of the Site. At this defined ice margin, as the glacial ice melted the ice front was stagnant at this location. This stagnant ice margin likely formed the temporary glacial dam behind which the temporary glacial lake formed, and into which the Dividend Brook (db) deltaic materials (sand and gravel) were deposited.

The USGS does not map any eskers or other significant geologic features at the Site.

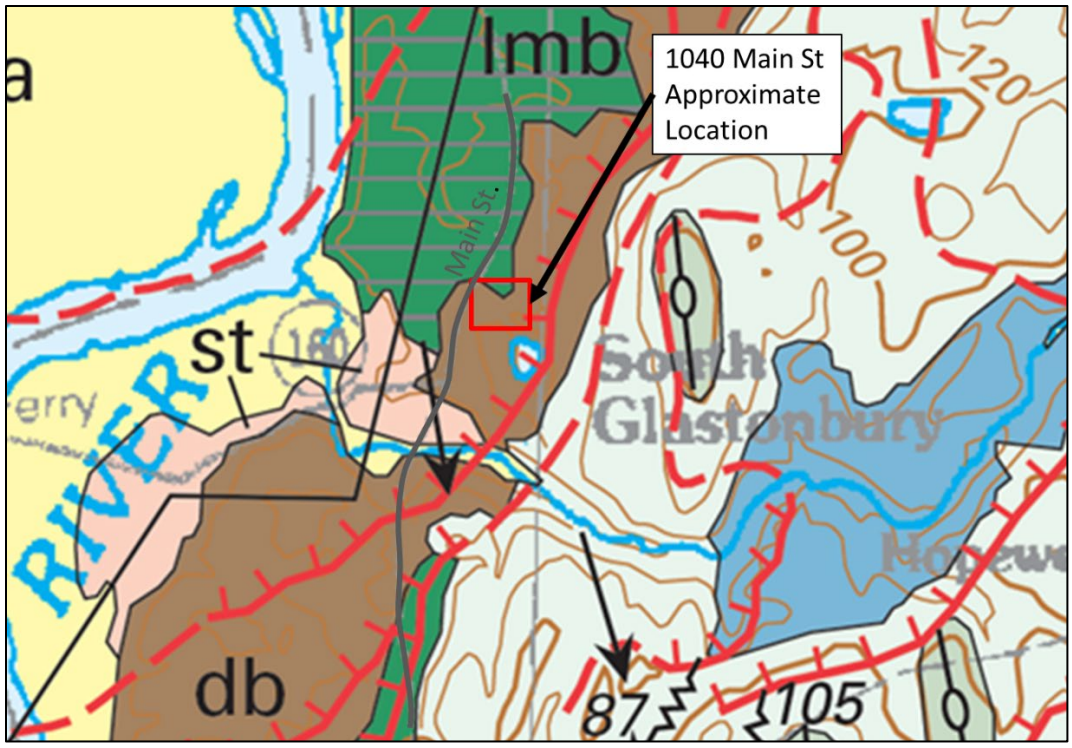


FIGURE 2 (SOURCE: USGS 2005)

Site Topographic History

Eskers are typically long, narrow, sinuous deposits of sand and gravel formed by meltwater transporting sediments, within, under or on top of glacial ice. When the ice melts, the former meltwater streambed deposits collapse, forming an esker (a positive relief feature) where the stream formerly existed, within, under or on the ice. Given that eskers are identified by their geomorphic features, an assessment of changes to topography and land use caused by human activities is required to determine if geomorphic features are natural or caused by excavation or filling through history.

A review of the 1934, 1952, and 1970 aerial photographs for the Site show that significant changes in the Site's use and topography appear to have occurred. Attachment C presents the Aerial Photographs with the approximate Site outlined. In 1934, the central portion of the Site appears to have been used as an orchard, with a stream crossing the Site from South to North, draining the large pond located near the southeast corner of the Site. The 1952 aerial photograph shows that the orchard is apparently no longer present, a field has been cleared on the north-central portion of the Site, and adjacent to the stream, an area of excavation is present just to the east side of the stream. The 1970 aerial photograph shows that much of the Site is now forested and the excavation area east of the stream contains a small pond.

Historic topographic maps from 1900, 1946, 1953, 1964, and 1992 were reviewed and are included in Attachment D with the approximate Site boundary depicted. The largest change in Site topography appears to be a change between 1900 and 1946. In 1900, a northerly flowing stream crosses the Site. However, by 1946, the topography has been modified to show an easterly oriented valley near the eastern end of the Site and the stream is no longer depicted. This change is consistent with the excavation observed in the 1952 aerial photograph.

Field Assessment

On May 19, 2021, Mr. David B. Terry from GEI conducted a site visit to evaluate geomorphic Features 1 and 2 to determine if they could represent eskers. In addition, soils on both features were examined to determine if the soil type is consistent with the soils expected from the USGS mapped Dividend Brook ice-marginal deltaic deposits or may be more indicative of an esker.

Geomorphic Observations

Geomorphic Feature 1 – Field observations confirmed that the hill located along the western boundary of the Site is a relatively short, isolated hill. This shape is not consistent with the geomorphology of an esker, which is a long (sometimes miles long), sinuous steep-sided, narrow hill.

Geomorphic Feature 2 – Field observations confirmed that the curvilinear hill located in the eastern part of the Site is steep sided to the northeast side of the hill, where excavation had occurred between 1946 and 1952 based on historic aerial photograph and topographic map evidence. To the southwest side of the feature, topography drops off less steeply. The slope on the southwest side of the feature appears to have been created by a current intermittent drainage (likely the formerly mapped, northerly-flowing stream). An erosional bench above the axis of the stream bottom was observed adjacent to the curvilinear geomorphic feature indicating the stream formerly flowed closer to the geomorphic feature. Additionally, the topographic high elevation of approximately 130 feet on the feature is nearly identical on the opposite side of the former stream, indicating that the stream has downcut into the geologic deposits creating the small erosional bench and the slope on the southwest side of the feature. On the northeast side of the curvilinear feature, the steep slope was clearly created by excavation that occurred sometime between 1946 and 1952. At the eastern end of the feature, the topography rises to approximately 145 feet near the eastern property boundary and the curvilinear feature broadens into a wide hill. As such, the curvilinear feature appears formed from excavation on the northeast and a downcutting stream on the southeast. The feature therefore does not represent an esker.

Soils Observations

During the Site visit on May 19, 2021, three shallow test pits were hand-dug to evaluate the nature of the soils. Test pit TP-1 was dug into the eastern slope of Geomorphic Feature 1, TP-2 was dug into the eastern slope of Geomorphic Feature 2, and TP-3 was dug into the hillside slope west of the intermittent stream adjacent to Geomorphic Feature 2 to evaluate if the materials on Geomorphic Feature 2 were similar to those on the other side of the drainage. Photographs of the test pits and soils are included in Attachment E.

Soils at TP-1 (Geomorphic Feature 1) consisted of loose, dark red-brown coarse to very coarse sand with some gravel and few angular cobbles. These materials are consistent with ice-marginal deltaic deposits as mapped by the USGS.

Soils at TP-2 (Geomorphic Feature 2) consisted of loose, red-brown medium to fine sand with little gravel and trace cobbles. These materials are consistent with ice-marginal deltaic deposits as mapped by the USGS.

Soils at TP-3 (located west of the intermittent drainage adjacent to Geomorphic Feature 2) were similar to those observed at TP-2 and consisted of loose to moderately dense red-brown fine to coarse sand with little gravel. These materials are also consistent with ice-marginal deltaic deposits and the similarity with the materials at TP-2 support that the intermittent stream downcut through the deltaic deposits creating the southwestern slope of Geomorphic Feature 2.

Conclusions

There is no evidence of an esker or other significant geologic feature being located on the Site. The soils at the Site represent deltaic sands deposited into a temporarily dammed glacial lake.

The elevated Geomorphic Feature 1, on the western side of the Site is not consistent with the anticipated geomorphology of an esker. The elevation of this feature (150 ft) is consistent with the elevation of the delta deposits reported by USGS for the mapped Dividend Brook deposits (USGS, 2005) and the soils on this feature are consistent with ice-marginal deltaic deposits.

The elevated Geomorphic Feature 2 located on the eastern portion of the Site has been formed by excavation on the northeast side of the Site sometime between approximately 1946 and 1952 and a downcutting stream on the southwest side of the Site.

Overall, the surficial materials at the Site represent glacial deltaic deposits and the topographic relief at the Site has been largely formed by stream erosion and by excavation and reworking at the Site.

GEI appreciates the opportunity to support Carrier Construction with our geologic services. If you have any questions, please call Doug Brink at (860) 368-5410.

Sincerely,

GEI CONSULTANTS, INC.

Charles D. Brink, LEP
Senior Project Manager
cbrink@geiconsultants.com

David B. Terry P.G., LEP
Vice President, Principal, Branch Manager
dterry@geiconsultants.com

DT/ah B:\Working\CARRIER CONSTRUCTION\2101248 Carrier Construction\01_ADMIN\Draft Geologic Assessment Report\1040 Main Glastonbury CT - Geologic assessment.docx

Enclosures:
Attachment A – Resume
Attachment B – References Cited
Attachment C – Aerial Photographs
Attachment D – Historic Topographic Maps
Attachment E – Test Pit and Soils Photographs

ATTACHMENT A

RESUME

David B. Terry, P.G., LEP
Vice President

David Terry is an environmental consultant and past member of GEI's Board of Directors. Since 1999, Mr. Terry has been a client account manager and team leader. He is currently the Branch Manager for GEI's Glastonbury, CT office. He has spent over 20 years assembling and directing multi-disciplinary project teams to assess, design, and implement solutions to complex DNAPL related problems migrating through complex geologic settings while working under state and federal (CERCLA and RCRA) regulatory programs. Mr. Terry's technical expertise is derived through his educational background as a geologist and a hydrogeologist and through a career spent evaluating and remediating contaminated sites.

Mr. Terry has been responsible for guiding and conducting hundreds of Remedial Investigation/Feasibility Study (RI/FS) projects throughout the Eastern United States. He has also been responsible for designing and managing site remediation projects, risk exposure assessments, and assisting clients in evaluating financial liability allocations at sites involving multiple PRPs.

EDUCATION
M.S., Geology, Kansas State University
B.A., Geology, State University of New York

EXPERIENCE IN THE INDUSTRY
31 years

EXPERIENCE WITH GEI
23 year(s)

REGISTRATIONS AND LICENSES
Licensed Environmental Professional, CT No. 327
Professional Geologist, PA No. PG-003050-G

Working closely with corporate and outside counsel, as well as financial experts, Mr. Terry has used his technical abilities to develop corporate-level strategic decision-making frameworks and liability management approaches.

PUBLICATIONS

- Terry, David, S. Canton, T. Bell. 2008. Stressor Identification – a Key Step in Evaluation of an MGP-Affected Urban Waterway. Third International Symposium and Exhibition on the Redevelopment of Manufactured Gas Plant Sites (MGP 2008). Mystic, Connecticut.
- O'Neil, Matthew, J. Parillo, D. Terry, W. Ryan, T. Leissing, S. Carter, G. Cross, A. Omorogbe. 2008. Evaluation of the Hydrologic Effects of Oxygen Injection for Biostimulation in an Upper Glacial Aquifer on Long Island. 2008 NGWA Conference on Eastern Regional Ground Water Issues. National Ground Water Association.
- Marando, Michael, D. Terry, J. Collins, D. Unites, A. Prophete, T. Bell. 2006. Real-Time Naphthalene Monitoring Using an Ultra Fast Gas Chromatograph. Water Environment Federation. WEF/AWWA Odors and Air Emissions 2006.
- Terry, David, A. Brey, L. Willey, T. Bell, M. McCormick, 2000. Resonant Sonic Drilling at Three Former MGP Sites: Benefits and Limitations. Gas Technology Institute Site Remediation Technologies & Environmental Management Practices in the Utility Industry. December 4-7, 2000.
- Terry, David, K.M. Egers, 1996. Final Report for the Western Maryland Watershed Liming Pilot Study. Maryland Department of Natural Resources, Chesapeake Bay Research and Monitoring Division CBRM-AD-94-6.
- Terry, David, R.M. Price, R.J. Klauda, R.P. Morgan II, and M.L. Bowman, 1994. Watershed Liming and Hydrologic Event Monitoring of an Acidic Stream in Western Maryland. Annual Meeting of the American Fisheries Society in Halifax, Nova Scotia. August 21 - 25, 1994.
- Terry, David, 1990. Geochemistry of Waters in the Dakota Aquifer in Southwestern Kansas: 7th Annual Water and the Future of Kansas Conference, Proceedings. March 7 and 8, 1990.
- Terry, David, 1990. Groundwater Chemistry Analysis of the Dakota Aquifer in Southwest Kansas: 24th Annual Meeting, South-Central Section Geological Society of America, Abstracts with Programs. March 5 and 6, 1990.

ATTACHMENT B

REFERENCES CITED

USGS, 2005. *Quaternary Geologic Map of Connecticut and Long Island Sound Basin. U.S. Department of the Interior, U.S. Geological Survey*. *Scientific Investigations Map 2784*. Janet Radway Stone, John P. Schafer, Elizabeth Haley London, Mary L. DiGiacomo-Cohen, Ralph S. Lewis, and Woodrow B. Thompson.

Glastonbury, 1996. *The Town of Glastonbury Subdivision and Resubdivision Regulations,* Effective June 1, 1993 and amended May 28, 1996.

ATTACHMENT C

AERIAL PHOTOGRAPHS

1934 Aerial and Approximate Site Boundary

ATTACHMENT C

AERIAL PHOTOGRAPHS

1952 Aerial and Approximate Site Boundary

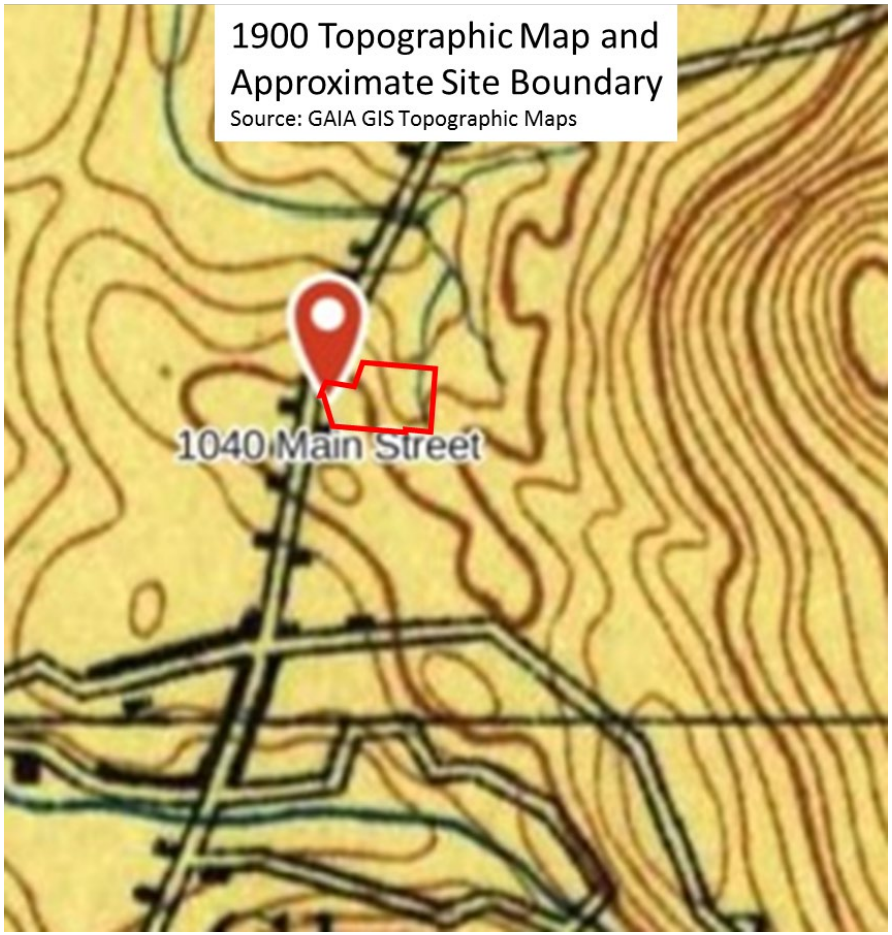
ATTACHMENT C

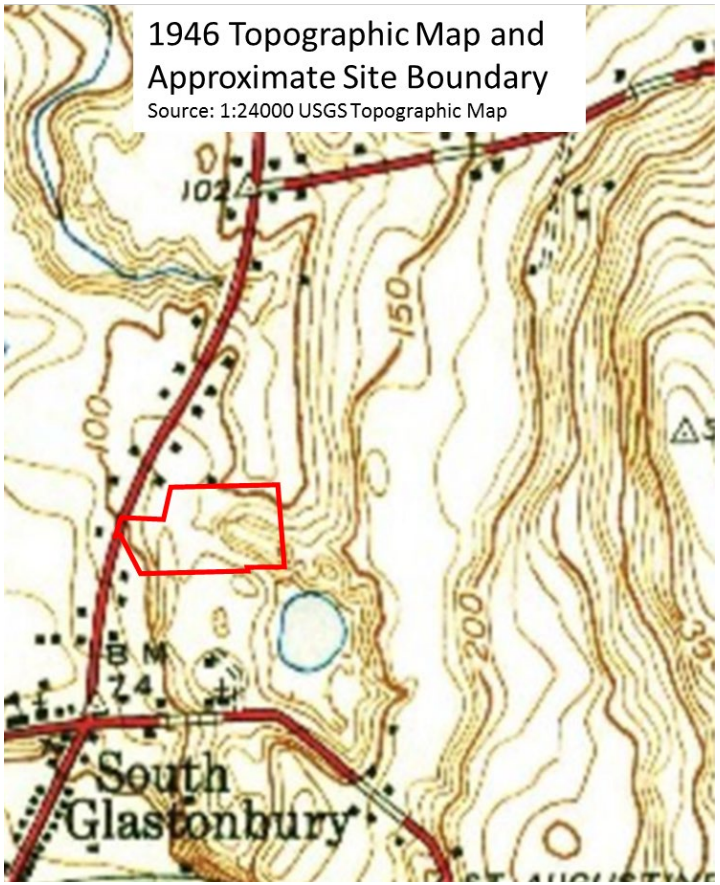
AERIAL PHOTOGRAPHS

1970 Aerial and Approximate Site Boundary

ATTACHMENT D

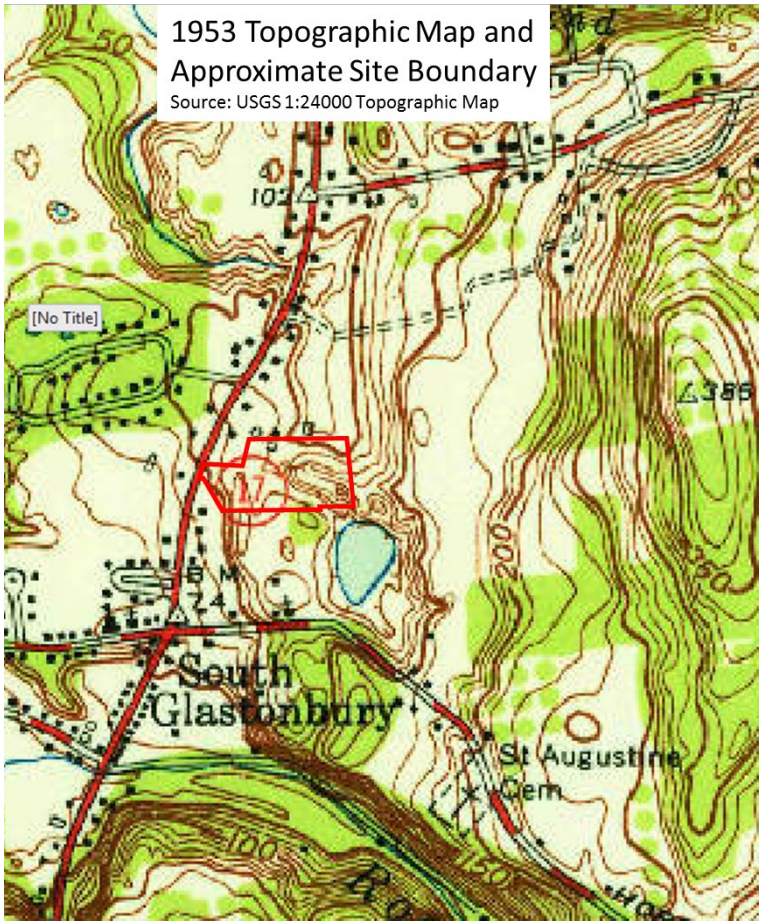
HISTORIC TOPOGRAPHIC MAPS

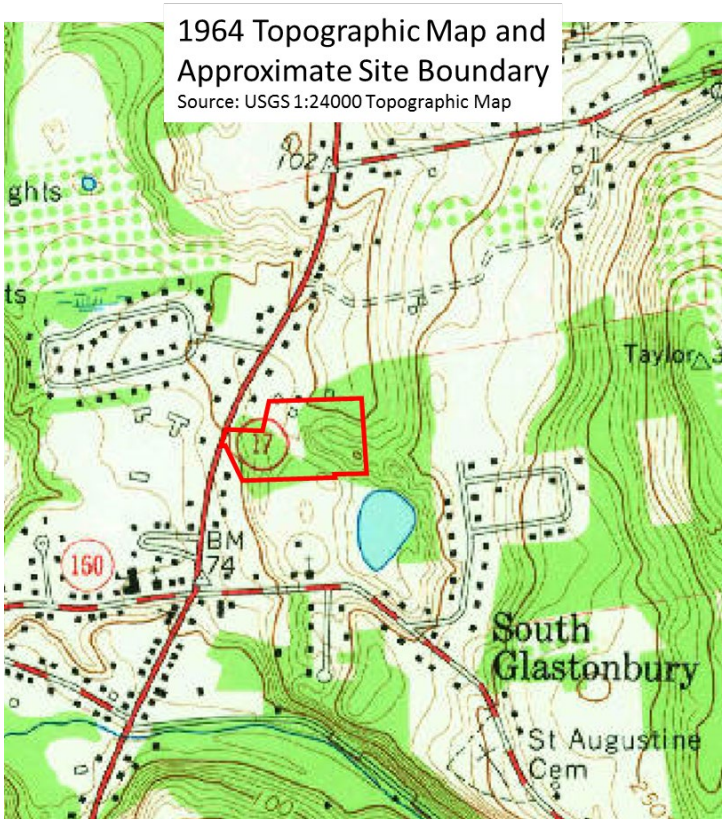




ATTACHMENT D

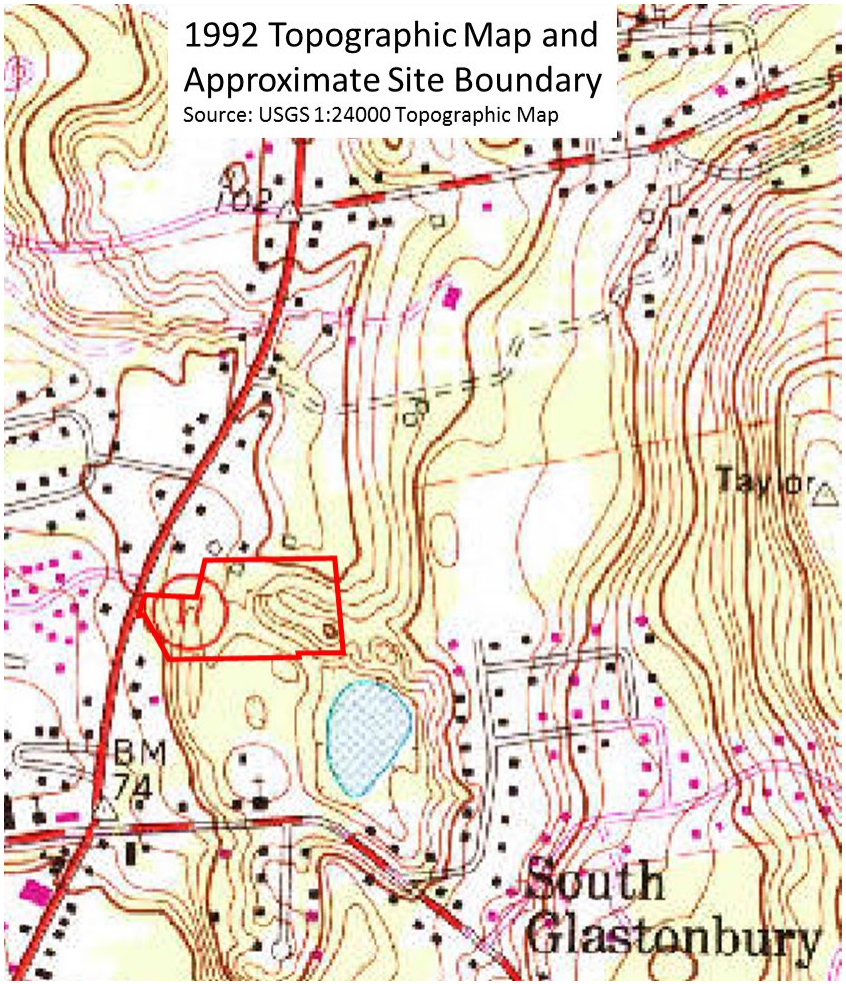
HISTORIC TOPOGRAPHIC MAPS





ATTACHMENT D

HISTORIC TOPOGRAPHIC MAPS



ATTACHMENT E

TEST PIT PHOTOS AND SOILS PHOTOS

Test Pit 1 (East slope Geomorphic Feature 1)

TP-1 Soils - dark red-brown coarse to very coarse sand with some gravel and few angular cobbles

ATTACHMENT E

TEST PIT PHOTOS AND SOILS PHOTOS

Test Pit 2 (East slope Geomorphic Feature 2)

TP-2 Soils - red-brown medium to fine sand with little gravel and trace cobbles

ATTACHMENT E

TEST PIT PHOTOS AND SOILS PHOTOS

Test Pit 3 (SW of Geomorphic Feature 2)

TP-3 Soils - red-brown fine to coarse sand with little gravel

COVER SHEET TO BE LEGIBLY COMPLETED AND SUBMITTED ALONG WITH ALL OTHER APPLICATION MATERIALS (Parts I, II, II and IV as applicable)

1. **Applicant's name:** Carrier Construction, Inc.
c/o Gino Carrier, President
P.O. Box 1842
Bristol, CT 06010

2. **Title of project:** 7-Lot Subdivision

3. **Address or descriptive location of proposed project or regulated activity:**
1040 Main Street (E10/4140/E0129B)

4. **Please check/indicate all that apply with regard to the application being submitted:**

Circumstance	**check**	**requirements**
• application for only a regulated activity	X	complete Part I
• application also involves a proposed **subdivision**, special permit or planned area development	X	complete Part II
• application also involves a "significant" impact activity (see definition)		complete Part III
• application for renewal or time extension for or amendment to an issued permit		complete Part IV

5. **Certification by applicant**

By my signature I hereby certify that:

i. the applicant is familiar with all of the information provided in the application and is aware of the penalties for obtaining a permit by deception or by inaccurate or misleading information; and

ii. the Agency members and their designated agents are authorized to inspect the property, at reasonable times, both before and after a final decision has been issued, and after completion of the project.

Signature of Applicant: **Date:**

Gino Carrier — 5/27/2021

Carrier Construction, Inc.
By: Gino Carrier
Its: President

PART I

All applications to authorize proposed regulated activities shall legibly include the following information in writing and on maps and plans or drawings:

A. The applicant's name, home and business mailing addresses and telephone numbers; if the applicant is a Limited Liability Corporation or a Corporation the managing member's or responsible corporate officer's name, address, and telephone number. **Carrier Construction, Inc., c/o Gino Carrier, Its President. Business Address: 84 Andrews Street, Bristol, CT 06010. Mailing Address: P.O. Box 1842, Bristol, CT 06010. Home Address: 133 Craigemore Circle, Avon, CT 06001. Phone: (860)883-5388.**

B. The landowner's name, mailing address and telephone number and a signed written consent letter from the landowner if the applicant is not the owner of the land upon which the subject activity is proposed. **N/A, landowner is Applicant.**

C. The applicant's interest in the land. **Landowner.**

D. Using the appropriate United States Geological Survey quadrangle topographic map, a location map at a scale of 1 inch = 2,000 feet identifying the geographical location of the land which is the subject of the proposed activity. ***See Attached* Part I.D.**

E. A description of the land in sufficient detail to allow identification of the inland wetlands and watercourses, the area(s) (in acres or square feet) of wetlands or watercourses to be disturbed by the proposed regulated activity, soil type(s), and wetland vegetation. ***See Attached* Part I.E.**

F. A written narrative on the purpose and a description of the proposed regulated activity. ***See Attached* Part I.F.**

G. The proposed erosion and sedimentation controls and other management practices and mitigation measures, such as but not limited to, any measures to detain or retain stormwater runoff or recharge groundwater, any plantings for habitat improvements, and any other measures proposed to mitigate the potential environmental impacts, which may be considered as a condition of issuing a permit or license for the proposed regulated activity including, but not limited to measures to (1) prevent or minimize pollution or other environmental damage, (2) maintain or enhance existing environmental quality, or (3) in the following order of priority: restore, enhance, and create productive, functional wetland or watercourse resources. ***See Plan Set*.**

H. A map at a scale of 1 inch equals 100 feet identifying the topographical features of the property to be affected by the proposed activity, adjacent lands, adjacent regulated areas, such as upstream and/or downstream areas as may be identified by the Agency or its designated agent, and other pertinent features including, but not limited to, existing and proposed property lines, roads, and drives, existing and proposed buildings and their utilities, topography, soil types, the limits of inland wetlands, watercourses and upland review areas, existing and proposed lands protected as open space or by conservation easements, and types of vegetative cover. ***See Plan Set*.**

I. A site plan at a scale that provides sufficient detail showing existing and proposed measures to mitigate the potential environmental impacts, including, but not limited to dedicated open space areas, along with their computed land area(s), and areas protected by conservation easements or restrictions, along with their computed land area(s). ***See Plan Set*.**

J. A site plan showing the existing and proposed impervious surfaces, along with their computed land area(s), and the existing and proposed management practices that serve to mitigate the hydrologic, thermal and other adverse effects caused by such impervious surfaces. ***See Plan Set and*** **Drainage Calculations prepared by Wolff Engineering dated May 27, 2021.**

K. A site plan showing the proposed activity and existing and proposed conditions in relation to wetlands and watercourses and upland review area(s) and identifying any further activities associated with, or reasonably related to, the proposed regulated activity which are made inevitable by the proposed regulated activity and which may have an impact on wetlands or watercourses. ***See Plan Set*****.**

L. A title block and legend of symbols used for each plan or map or drawing indicating the name of plan or map or drawing, date prepared and subsequent revision dates, and scale. ***See Plan Set.***

M. Names and addresses of abutting property owners as shown in the records of the tax assessor of the municipality as of a date no earlier than thirty (30) days before the date the application is submitted to the Agency. ***See Attached*** **Part I.M.**

N. Certification by the applicant that the applicant is familiar with all the information provided in the application and is aware of the penalties for obtaining a license or permit through deception or through inaccurate or misleading information. ***See Cover Page, No. 5, i.***

O. An alternative to the submitted application which would cause less or no environmental impact to wetlands or watercourses and why the alternative as set forth in the submitted application was chosen; all such alternatives shall be diagramed on a site plan or drawing. ***See Attached*** **Part I.O – Alternatives.**

P. The calculated (1) total area (square feet) of wetlands and watercourses on the subject property and (2) total area (square feet) of regulated area that would be potentially disturbed by the proposed regulated activities. **(1) total area of wetland or watercourses = 28,839 ± s.f.; (2) total area of potential disturbance in the wetlands & upland review area is 30 ± s.f. (wetlands) and 45,145± s.f. in the upland review area.**

Q. Authorization for the members and designated agent(s) of the Agency to inspect the subject land, at reasonable times, during the pendency of an application and for the life of the license or permit. ***See Cover Page, No. 5, ii.***

R. A completed CT DEEP reporting form (such form and instructions provided with these forms) whereby the Agency or its designated agent shall revise or correct the information provided by the applicant and submit the form to the Commissioner of Environmental Protection in accordance with Section 22a-39-14 of the Regulations of Connecticut State Agencies. **A completed CT DEEP Reporting Form is included with this Application.**

S. Submission of the appropriate filing fee based on the fee schedule established in Section 15-22 of Town Code of Ordinances (fee schedule attached). **A check in the amount of $540.49 is enclosed with this application, please see Fee Schedule page for fee calculation.**

T. The applicant shall certify whether:
   a. any portion of the property on which the regulated activity is proposed is located within 500 feet of the boundary of an adjoining municipality; ***No.***

b. traffic attributable to the completed project on the site will use streets within the adjoining municipality to enter or exit the site; ***No.***

c. sewer or water drainage from the project site will flow through and impact the sewage or drainage system within the adjoining municipality; or ***No.***

d. water runoff from the improved site will impact streets or any other property within the adjoining municipality. ***No.***

U. If the Agency deems that a peer review of any information submitted by the applicant is warranted, the applicant will be required to pay the cost of that peer review prior to a final decision. Pursuant to Section 22a-22a(e) of the Connecticut General Statutes, the Agency may require a filing fee to be deposited with the Agency in an amount sufficient to cover the reasonable cost of reviewing and acting upon the application including, but not limited to, the cost of peer reviews of information submitted by the applicant.

V. Any other information the Agency deems necessary to understand exactly what the applicant is proposing.

PART II.
Any application involving a land use proposal subject to these regulations and **also subject to subdivision or special permit or planned area development** application shall be **required to contain the following additional information and to explain how the proposal meets the goals and objectives referenced in L and M within this Part II:**

A. All wetland boundaries on the property shall be identified by a soil scientist using blue survey tape and located by a Licensed Land Surveyor; the soil scientist shall consecutively number the survey tapes that mark boundary lines of all wetlands on the subject property; the survey tape shall be located by a Licensed Land Surveyor using field survey techniques and each tape location and number shall be plotted onto the site plan. ***See Plans, the wetland boundaries have been identified by a soil scientist and located, the location has been placed on the plans.***

B. All watercourses identified on the property shall be located and accurately identified on the site plan to the satisfaction of the Agency or its designated agent. ***The vernal pool was located on the site and has been identified and is shown on the Site Plan.***

C. In the situation where an upland review area may extend onto the subject property due to the likelihood of the presence of wetlands or watercourses on a neighboring property, then one of the following shall occur.

1. preferably, permission to identify and survey the wetlands boundary or watercourse limits from the neighboring landowner shall be sought by the applicant; in which case if permission is granted, then the wetlands boundary and/or watercourse identification processes as presented in A and B above shall apply; or

2. alternatively, a best-educated approximation method utilizing resource maps and other interpretive techniques shall be taken to approximate the wetlands boundary or watercourse limits on the neighboring property and the limits of the regulated area on the subject property; the person responsible for approximating such boundaries and limits shall provide a report on the rationale used in approximating such boundaries and limits.

D. A written report by the soil scientist that includes the names of the applicant and project, the location of and limits of the property investigated, the dates of the soil investigations, certification that the mapping of soil types is consistent with the categories established by the national Cooperative Soil Survey of the USDA Natural Resources Conservation Service, a description of each soil mapping unit investigated, the set of the consecutive numbers used on the survey tapes to identify the wetland boundaries, and a certified statement that the wetland boundaries and the mapping of soil types appearing on the site plan are, to the best of the soil scientist's knowledge, true and accurate. ***See attached*** **Wetlands/Watercourses Delineation Report prepared by Davidson Environmental, LLC, dated 8/18/20, and Vernal Pool Survey Findings and Recommended Protection Measures prepared by Davidson Environmental, LLC, dated April 15, 2021.**

E. A map of sufficient scale shall be submitted indicating each surficial drainage area influencing each distinct wetland area or watercourse on the property. ***See*** **Section 9.0 – Watershed Maps of the Drainage Calculations prepared by Wolff Engineering dated May 27, 2021.**

F. A wetlands and/or watercourses report, prepared by a qualified person, that contains a written description for each distinct wetland area and watercourse on the subject property, including, but not limited to wetland and watercourse characteristics related to physical features, vegetation, wildlife, ecological communities, wetland/watercourse functions and values, its/their relationship to adjacent

upland areas, and effects of the proposed activity on these wetlands and watercourse characteristics. ***See attached*** **Wetlands/Watercourses Delineation Report prepared by Davidson Environmental, LLC, dated 8/18/20, and Vernal Pool Survey Findings and Recommended Protection Measures prepared by Davidson Environmental, LLC, dated April 15, 2021.**

G. A site plan at a scale of 1 inch= 40 feet, or at a scale that exhibits greater detail, prepared by a professional engineer, land surveyor, architect or landscape architect licensed by the state or by such other qualified person indicating the following: ***See*** **Plan Set.**

1. the location and limits of all wetlands, watercourses and upland review areas;

2. the proposed alterations and uses of wetlands, watercourses and upland review areas;

3. all proposed activities on the property (e.g. grading, filling and excavation of the land, removal of vegetation, surface and subsurface measures to manage the drainage of water, construction or placement of structures, landscaping, outdoor lighting) and existing and proposed conditions in relation to wetlands and watercourses, including activities and/or conditions located outside of
the regulated area(s) that may have an impact on wetlands and/or watercourses; the details of any
proposed outdoor lighting shall be shown on a separate lighting plan which also represents the estimated levels of light extending beyond the proposed source(s) of light;

4. the land contours;

5. the locations of other prominent features such as bedrock outcrops, stone walls, old woods roads, existing structures and drives, and trees deemed by the Agency or its designated agent to be of noteworthy value; and

6. the boundaries of land ownership for the subject land and for the abutting properties along with the names of all such landowners.

H. A written description of the alternatives considered and subsequently rejected by the applicant and why the alternative set forth in the application was chosen with all such alternatives diagrammed on a separate plan or drawing. ***See Attached*** **Part II.H – Alternatives.**

I. A written description of how the applicant will change, diminish, or enhance the ecological communities and functions of the wetlands or watercourses involved in the application and for each alternative. ***See Attached*** **Part II.I – Change, Diminish or Ecological Enhancements.**

J. A written description of the management practices and other measures designed to mitigate the impact of the proposed activity. ***See Attached*** **Part II.J – Management Practices.**

K. A written description of the intended or required physical and chemical characteristics of any fill material proposed within the regulated area. ***See Attached*** **Part II.K – Fill Material.**

L. Goals and objectives which shall be demonstrated in the application:

1. for just those targeted watersheds identified within subsection 1 under the definition of

"upland review area" found within Section 2.1 of the regulations, the land use proposal related to the proposed regulated activity should not result in the effective impervious surface coverage exceeding ten (10) percent on the subject property; public road reconstruction projects within established public rights-of-way are exempt from the goal and objective within this subsection; and

2. the land use proposal should be brought into existence utilizing the following policy as expressed in the following hierarchy:

   a) avoid encroachment into all regulated areas;

   b) avoid encroachment into all wetlands and watercourses;

   c) avoid encroachment into any wetland and watercourse that exhibits multiple wetland and watercourse functions that are of high value;

   d) avoid encroachment into any wetland and watercourse that exhibits multiple wetland and watercourse functions that are of moderate value;

   e) avoid encroachment into any wetland and watercourse that exhibits one wetland and watercourse function that is of high value;

   f) avoid encroachment into any wetland and watercourse that exhibits one wetland and watercourse function that is of moderate value;

   g) avoid encroachment into any wetland and watercourse that exhibits one wetland and watercourse function of low value; and

   h) encroachments that cannot be avoided must be minimized.

M. A written summary of how the proposal complies with the environmental policies contained within the Town of Glastonbury's adopted and in-force Plan of Conservation and Development (http://www.glasct.org/index.aspx?page=122). ***See Attached*** **Part II.M – Plan of Conservation and Development.**

N. The Agency may require applicants and/or Permittees to develop and implement a water quality testing program (before and after development) that assesses the impacts or affects on downgradient wetlands and/or watercourses from the land use associated with the regulated activity; the results from such a required water quality testing program are solely intended for the collection and analysis of data for educational and scientific purposes.

If the proposed activity involves a significant impact, as determined by the Agency, **then additional information** (in addition to all other information required within Parts I and II), based on the nature and anticipated effects of the activity, including but not limited to the following, **shall be required:**

A. A comprehensive written environmental impact statement report for the entire land use proposal, including, but not limited to a description of how the application will change, diminish, or enhance the ecological communities and functions of the wetlands or watercourses involved in the application, and each alternative which would cause less or no environmental impact to wetlands or watercourses, and a description of why each alternative considered was deemed neither feasible nor prudent.

B. Maps and descriptions that identify downstream and downgradient regulated areas which are off-site and their condition, existing off-site structures on adjacent properties and watershed or drainage area boundaries which influence the subject regulated area.

C. Engineering reports and analyses and additional drawings to fully describe the proposed activity including any filling, excavation, drainage or hydraulic modifications to watercourses and the proposed erosion and sedimentation control plan.

D. Site specific, high intensity soils mapping that identifies the entire site's soil types consistent with the categories established by the National Cooperative Soil Survey of the United States Department of Agriculture's Natural Resources Conservation Service.

PART IV.

Any **application to renew or amend an existing license or permit** shall be filed with the Agency in accordance with Section 8 of the regulations at least sixty-five (65) days prior to the expiration date of the license or permit. Any application to renew or amend such an existing license or permit shall contain the following information:

A. The application shall incorporate the documentation and record of the prior/original application.

B. The application shall describe the extent of work completed at the time of filing and the anticipated time schedule for completing the activities authorized in the license or permit.

C. The application shall state the reason why the authorized activity was not initiated or completed within the time specified in the license or permit.

D. The application shall describe any changes in facts or circumstances involved with or affecting wetlands or watercourses or use of the land for which the license or permit was issued.

E. The Agency may, prior to the expiration of a license or permit, accept an untimely application to renew such license or permit if the authorized activity is ongoing and allow the continuation of work beyond the expiration date if, in its judgment, the license or permit is likely to be renewed and the public interest or environment will be best served by not interrupting the activity.

FEE SCHEDULE
for Applications pursuant to the
Inland Wetlands and Watercourses Regulations

Fee Schedule. Application fees shall be based on the following:

a) Permitted Uses as of Right and Nonregulated Uses (Section 4 of the Regulations) shall be at NO CHARGE.

b) Regulated Uses and Activities (Section 6 of the Regulations). The total fee shall be the cumulative amount of the following factors, when applicable:

    1. the total wetlands and/or watercourses area (in square feet) on the subject property multiplied by the rate of $1.00 per 1,000 square feet; plus ***28,839 s.f. wetlands = $28.84***

    2. the total regulated area (in square feet) to be disturbed by regulated activities multiplied by the rate of $10.00 per 1,000 square feet; plus ***30 s.f. wetlands + 45,145 s.f. URA disturbed = $451.75***

    3. $400.00 if the proposed activity is declared a significant activity by the Agency.

c) Map Amendment Petitions (Section 14.3 of the Regulations) shall be $200.00.

d) Renewals or Extensions of the Expiration Date to a previously issued permit (Sections 7.10 and 11.7 of the Regulations) shall be $100.00.

e) Amendment of a Previous Approval (Section 7.10 of the Regulations) that is not deemed a significant activity shall be the prescribed amount as determined in b.2 above.

f) Transfer or assignment of a previously issued permit (Section 11.8 of the Regulations) shall be $25.00.

g) Exemption. Boards, commissions, councils and departments of the Town of Glastonbury are exempt from all fee requirements.

h) Waiver. The applicant may petition the Agency to waiver, reduce or allow delayed payment of the fee required. Such petitions shall be in writing and shall state fully the facts and circumstances the Agency should consider in its determination under this section. The Agency may waive all or part of the application fee if the Agency determines that:

    1. the activity applied for would clearly result in a substantial public benefit to the environment or to the public health and safety and the applicant would reasonably be deterred from initiating the activity solely or primarily as a result of the amount of the application fee; or

    2. the amount of the application fee is clearly excessive in relation to the cost to the Town for reviewing and processing the application.

The Agency shall state upon its record the basis for all actions pertaining to a request for a waiver.

TOM MOCKO, ENVIRONMENTAL PLANNER 06-23-89