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Existing Georgetown City Hall and Fire Station #1

120 Frazer Street
and 1405 Prince Street
Georgetown, South Carolina

**GS2 Project Number 16-20251-L
November 10, 2016**

Report of Geotechnical Exploration Services

Prepared for:

City of Georgetown
Administration Department
P.O. Drawer 939, (29442)
120 North Fraser Street
Georgetown, South Carolina 29440



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November 10, 2016

City of Georgetown
Administration Department
P.O. Drawer 939, (29442)
120 North Fraser Street
Georgetown, South Carolina 29440

Attention: Mr. Paul Gardner, City Administrator

Via Email: pgardner@coqsc.com

Reference: Report of Geotechnical Exploration Services
Existing Georgetown City Hall and Fire Station #1
120 North Frasier Street and 1405 Prince Street
Georgetown, South Carolina
GS2 Project Number 16-20251-L

Dear Mr. Gardner;

This report presents our supplemental geotechnical exploration of the existing Georgetown City Hall and Fire Station #1 sites, in Georgetown, South Carolina. Information obtained from our geotechnical exploration has been used to further evaluate the existing site conditions that were preliminarily explored and presented in our "Preliminary Report of Subgrade Investigation", dated August 23, 2016. This work was performed in general accordance with our proposal numbered P8819-16, dated August 24, 2016.

Recommendations detailed in this report are specific to the soil conditions in the immediate vicinity of the boring locations for this particular project. This report does not include any environmental assessment of soils, surface water or groundwater, the determination of wetlands, the determination of noise impact, the assessment of air quality, the identification of cultural resources, and the identification of endangered species. These services are beyond the scope of services of a geotechnical exploration.

PROJECT INFORMATION

Our understanding of the project is based on conversations with Mr. Paul Gardner, with the City of Georgetown, and our prior studies on the subject site. From these conversations and information, we understand that the concrete floor, with terracotta floor tile, in the rotunda area moved significantly upward, on August 9, 2016. Prior to August 9, 2016 movement, minor cracking was evident in the floor tile; however, the progression of the movement and cracking was noted to be more gradual in nature. The City Hall has had a previous history of settlement associated

with sinkholes and subsidence near or under its foundation, and a commercial building in near proximity collapsed along Highway 17 due to a sinkhole associated with an adjacent SCDOT drainage construction project.

We further understand that there is an area of exposed subgrade in the rear area of the existing Fire Station #1 that has been reported to be experiencing recent settlement.

SITE SETTING

Site Location

We understand that the existing Georgetown City Hall is located at 120 North Fraser Street, and Fire Station #1 is located at 1405 Prince Street, in Georgetown, South Carolina. The location of the existing structures relative to the nearby streets is shown on the *Site Location Map*, Figure 1 in Appendix A.

Existing Site Conditions

City Hall Site: The City Hall site is generally trapezoidal in shape, and, at the time of our visit, it was noted to be developed with the existing City Hall structure, and associated asphalt paved driveways and parking lots, as well as the existing elevated water tank, situated within the northeastern portion of the site and large wet well and holding pool infrastructure project located along the south western portion of the site at the intersection of Front and Fraser Streets. More specifically the site was noted to be bordered by North Prince Street to the north, Fraser Street to the west, Front Street to the south, and Dozier Street to the east.

From our review of the provided information, it appears that the original City Hall structure, and more recent additions to the City Hall structure, consists of a one-story in height building, constructed of a combination reinforced CMU block and metal stud framed wall system, with an assumed wood framed roof system, supported with a deep driven foundation system. Additionally, it is understood that the original construction was completed soon after 1977 (as the original construction plans provided for our review are dated September of 1977) and the newer additions completed at an unknown date thereafter.

Finally it is our understanding that the interior concrete slab-on-grade inside the existing Georgetown City Hall is showing signs of settlement in the form of cracking.

Fire Station #1: The Fire Station #1 site is generally square in shape, and at the time of our visit, was noted to be developed with the existing Fire Station #1 structure, and associated asphalt paved driveways and parking spaces. More specifically, the site was noted to be bordered by North Hazard Street to the north, an abandoned railroad bed to the west, Fraser Street to the south, Prince Street to the east



From our exterior reconnaissance of the Fire Station #1 structure, it appears to be a one-story in height building, constructed of a combination of a pre-engineered metal framed building with CMU block and metal stud infill walls, steel roof trusses, a sheet metal roof, and a clay masonry/sheet metal veneer. We assume that the structure is supported with a deep driven foundation system.

Site Topography

Topographically, the sites of the existing structures are located along a large, fairly level coastal plain, in downtown Georgetown, South Carolina. Original ground surface elevations across the majority of the sites appear to have ranged from about 5 to 9 feet above mean sea level (MSL). In general, the overall area that contains the two sites appears to slope to the south by southwest, with stormwater draining into the surrounding infrastructure and eventually into Georgetown Harbor which is the mouth of the Sampit River.

Finished floor elevations for the City Hall structure appear to be on the order of 11½ feet above MSL. Finish floor elevations for the Fire Station #1 were not available at this time but we assume that they are within 2 to 4 feet of the same elevation of the City Hall structure.

General topographic information was obtained from the USGS Georgetown South topographic quadrangle, Figure 2 in Appendix A, while site specific plans were utilized to determine post construction topographic data.

SUMMARY OF GEOTECHNICAL FIELD EXPLORATION

City Hall: The subsurface conditions along the *interior of the Existing City Hall* were explored with four (4) mechanically-augered soil borings (B-7 through B-10), with Standard Penetration Tests (SPT) taken at regular intervals, performed in general accordance with ASTM D1586 *Standard Test Method for Standard Penetration Test (SPT) and Split-Barrel Sampling of Soils*, while the recovered samples were visually and texturally classified by ASTM D2488 *Standard Practice for Description and Identification of Soils (Visual-Manual Procedure)*. These soil borings were extended to refusal depths ranging from 35 to 45 feet below the existing ground surface. These approximate boring locations are shown on the attached *Boring Location Plan II*, Figure 3 in Appendix A.

Additionally, the subsurface conditions along the *exterior of the Existing City Hall* were explored with eight (8) mechanically-augered soil borings (B-11 through B-18), with Standard Penetration Tests (SPT) taken at regular intervals, performed in general accordance with ASTM D1586 *Standard Test Method for Standard Penetration Test (SPT) and Split-Barrel Sampling of Soils*, while the recovered samples were visually and texturally classified by ASTM D2488 *Standard Practice for Description and Identification of Soils (Visual-Manual Procedure)*. These soil borings were extended to termination/refusal depths ranging from 10 to 60 feet below the existing



ground surface. These approximate boring locations are shown on the attached *Boring Location Plan III*, Figure 4 in Appendix A.

Fire Station #1: The subsurface conditions along the **exterior of the Existing Fire Station #1** were explored with six (6) mechanically-augered soil borings (B-19 through B-24), with Standard Penetration Tests (SPT) taken at regular intervals, performed in general accordance with ASTM D1586 *Standard Test Method for Standard Penetration Test (SPT) and Split-Barrel Sampling of Soils*, while the recovered samples were visually and texturally classified by ASTM D2488 *Standard Practice for Description and Identification of Soils (Visual-Manual Procedure)*. These soil borings were extended to refusal depths ranging from 5 to 35 feet below the existing ground surface. These approximate boring locations are shown on the attached *Boring Location Plan IV*, Figure 5 in Appendix A.

The borings were located in the field by measuring from existing building corners and site features.

SITE SOIL CONDITIONS

Regional Geology

The Georgetown region is located in the lower Coastal Plain subprovince of the Atlantic Coast Plain physiographic province. The lower Coastal Plain is topographically characterized by low relief, with generally sluggish drainage (very low gradients) of streams, and numerous swamps. The area of investigation is geographically located in the City of Georgetown, South Carolina, and geophysically located in South Carolina's Coastal Plain province. Eustatic sea-level fluctuations caused transgressive-regressive cycles that contributed to the interaction of the marine and fluvial processes. The Williamsburg Formation, which is within the Black Mingo aquifer system. Sediments within this formation are Paleocene Epoch deposits (55.8-65.5 million years ago, MYA). This formation is subdivided into two (2) members, known as the Chicora (upper member) and the Lower Bridge (lower member) Members. The top of the Williamsburg Formation strikes approximately N 88° E and dips approximately forty-seven (47) minutes per mile S 16° E (standard compass headings). The sediments of the carbonate-rich Chicora Member consist of elastic silts, calcareous clayey sands, quartz sands, some shell hash and phosphate grains, silt sands, and calcareous silty sands with cemented zones (lenses).

Local Site Geology

The subject site is located on the Princess Anne Terrace, a Pleistocene deposit consisting of Barrier-island and Estuarine environment deposits which overlie the Williamsburg Formation, an upper Paleocene deposit. More specifically, the subject site area typically will encounter alternating sediment layers that include, light-gray to dark-gray, phosphatic, poorly to moderately well sorted fine-grained quartz sand, bluish-gray, poorly sorted, fine to very coarse grained quartz sands and light-gray to bluish-gray muddy sand to sandy mud, clay, silt, silty sand, and clayey sand. Based on



South Carolina Geological Survey, the Pleistocene deposit in the area of the site ranges in thickness from 30 ft to 50 ft below the ground surface.

As indicated above, the Pleistocene deposit is underlain by the Williamsburg Formation, a Paleocene (65-55 Ma) deposit. The Williamsburg Formation consists of a dominantly black to dark gray clay to very fine quartz sand component overlying two carbonate-rich members identified as the Chicora member and the Lower Bridge member. The upper section of the formation is the Chicora member that is typically identified as a carbonate mud matrix supported, fine to coarse quartz sand to very coarse silt. The Lower Bridge member of the formation is encountered typically below the Chicora member (if present) and is typically identified as a carbonate cemented quartz and phosphatic sand.

Based on a review of a report prepared by William Doar III, of the South Carolina Geological Survey (SCGS), in 2011, titled *Geology of the City of Georgetown, SC based on drilling by the SC Geological Survey, SC Depart. Of Natural Resources*, boring GN-3 completed on-site is underlain by approximately 30 ft of Pleistocene organic laden (peat) muds believed to represent historical creek channels and swamps formed by the ocean transgressions, followed by the Chicora member of the Williamsburg formation. Drilling methods utilized encountered refusal in a cemented quartz sand, potentially the lower zone of the Chicora member. The Lower Bridge member was not encountered prior to refusal.

Boring GN-2 completed on-site is underlain by approximately 25 ft to 30 ft of Pleistocene Barrier-island and Estuarine deposits followed by the Chicora member of the Williamsburg Formation. Drilling methods utilized encountered a cemented zone believed to be the lower zone of the Chicora member overlying the Lower Bridge member of the Williamsburg formation at approximately 52 to 55 feet below ground surface. Furthermore, based on conversations with the SCGS, the Lower Bridge member is believed to support Karst (cavity flow) topography. Evidence of voids within the Lower Bridge member have been confirmed by others.

Limestone & Karst Geology

The deeper geology located in and around the City of Georgetown is composed of karst type limestone formations. Within these formations the soils contain carbonates. More specifically, the carbonates are found within the Chicora member, were deposited in a shallow, warm marine environment, during the Paleocene Epoch. The Chicora member is composed of terrestrial sediments and marine carbonates from mollusks, and colonial animals such as bryozoans and corals. The Paleocene was approximately fifty-six (56) to sixty-six (66) million years ago (MYA). During the Paleocene, the climate here was warmer (tropical-like) and the sea level was higher. Above the Paleocene Williamsburg Formation were deposited Eocene, Oligocene, Miocene, Pliocene and Pleistocene formations. The formations during these epochs were a combination of terrestrial and



marine formations. The Eocene, Oligocene, Miocene, Pliocene and parts of the Pleistocene formations have been eroded away due to erosion associated with the development of the Cape Fear Arch and by numerous sea level rises and falls. The Chicora member has had fifty-five (55) million years of weathering and exposure to allow solution cavities to develop.

Soil Conditions

The subsurface conditions encountered at the boring locations are detailed on the attached *Soil Test Boring Logs*. These logs represent our interpretation of the subsurface conditions at the boring locations based on our visual and textural examination of the recovered soil samples. The horizontal lines in the Soil Description column of the boring logs represent an approximate interface between various soil strata. It is important to understand that these horizontal lines represent an estimated depth of soil variance where as the actual soil change may be gradual. The boring logs are attached in Appendix B.

Interior of City Hall: A roughly 9 inch thick concrete slab was encountered inside the existing structure. Beneath the concrete slab, the borings performed inside of the existing structure (Borings B-7 through B-10) encountered intermittent layers of fill and native Coastal Plain deposits, consisting of clean, silty, and clayey sands (SP, SM, and SC) to depths of roughly 10 feet below the existing ground surface. Beneath these near surface materials, the borings encountered deeper native Coastal Plain deposits, consisting of clean and silty sands (SP and SM) with varying shell fragment content and limestone nodules, to refusal depths of 35 to 45 feet below the existing ground surface.

The near-surface intermittent layers of possible fill and native Coastal Plain deposits exhibited SPT N-values noted to range from 4 to 20 blows per foot (bpf), indicating very loose to firm relative densities. The underlying layers exhibited SPT N-values noted to range from W.O.H (Weight of Hammer) to 50/1" bpf, indicating very loose to very dense relative densities.

It is important to note that during drilling activities at the borings, a flowing soils condition was encountered at depths ranging from 18-1/2 to 28-1/2 feet below ground surface.

Exterior of City Hall: Surface materials, in the form of roughly 3 to 7 inches of topsoil were encountered across the site. Beneath the surface materials, the borings performed along the exterior of the existing structure (Borings B-11 through B-18) encountered intermittent layers of fill and native Coastal Plain deposits, consisting of clean, silty, and clayey sands (SP, SM, and SC) with varying contents of debris, to depths of roughly 10 feet (refusal/abandonment depth of Borings B-14 and B-17) below the existing ground surface. Beneath these surface layers, the borings encountered deeper native Coastal Plain deposits, consisting of clean and silty sands (SP and SM) with varying shell fragment content and limestone nodules, to



refusal depths of 35 to 55 feet below the existing ground surface. Finally, Boring B-15 encountered a basement layer of silty sands (SM) to the termination depth of roughly 60 feet below the existing ground surface. This layer is locally referred to as the Pee Dee Formation.

The near-surface intermittent layers of possible fill and native Coastal Plain deposits exhibited SPT N-values noted to range from W.O.H (Weight of Hammer) to 32 blows per foot (bpf), indicating very loose to dense relative densities. The underlying deeper native Coastal Plain deposits, exhibited SPT N-values noted to range from 6 to 50/1" bpf, indicating loose to very dense relative densities. Finally, the basement layer of silty sands (SM) exhibited SPT N-values noted to range from 15 to 17 bpf, indicating a firm relative density.

It is important to note that during drilling activities at Boring B-17, a possible petrol contamination was encountered. Therefore, the boring was abandoned at 10 feet below existing ground surface and grouted.

Fire Station #1: Surface materials, in the form of roughly 2 to 3 inches of asphalt underlain by 6 to 8 inches of base material (Borings B-19, B-20, B-21, and B-24), and 3 inches of topsoil (Borings B-22 and B-23), were encountered across the site. Beneath the surface materials, the borings performed along the exterior of the existing structure (Borings B-19 through B-24) encountered intermittent layers of possible fill and native Coastal Plain deposits, consisting of silty and clayey sands (SM and SC) to depths of 5 (abandonment depth of Boring B-23 and B-24) to 10 feet below the existing ground surface. Beneath these near surface layers, the borings encountered deeper native Coastal Plain deposits, consisting of clean and silty sands (SP and SM) with varying shell fragment content and limestone nodules, to refusal depths of 30 to 35 feet below the existing ground surface.

The near-surface intermittent layers of possible fill and native Coastal Plain deposits exhibited SPT N-values noted to range from 1 to 23 blows per foot (bpf), indicating very loose to very firm relative densities. The underlying deeper native Coastal Plain deposits exhibited SPT N-values noted to range from 2 to 50/3" bpf, indicating very loose to very dense relative densities.

It is important to note that during drilling activities at Borings B-23 and B-24, a possible petrol contamination was encountered. Therefore, the borings were abandoned at 5 feet below existing ground surface and grouted.

Additionally, it should be noted that all of the borings were abandoned with a grout pump mix injected into the augers as they were retrieved.



Groundwater

Interior of City Hall: Free groundwater was encountered at the time of drilling in the borings conducted inside of the Existing City Hall structure at depths ranging from 8 to 9-1/2 feet below the existing slab-on-grade elevation at the time of boring. For safety the boreholes were backfilled upon completion, therefore, 24-hour stabilized groundwater readings were not obtained.

Exterior of City Hall: Free groundwater was encountered at the time of drilling in Borings B-11, B-12, B-13, B-15, B-16, and B-18 conducted along the exterior of the Existing City Hall structure at depths ranging from 8-1/2 to 9-1/2 feet below the existing ground surface at the time of boring. For safety the boreholes were backfilled upon completion, therefore, 24-hour stabilized groundwater readings were not obtained.

Fire Station #1: Free groundwater was encountered at the time of drilling in the Borings B-19 through B-22 conducted along the exterior of the Existing Fire Station #1 structure at depths ranging from 8 to 9 feet below the existing ground surface at the time of boring. For safety the boreholes were backfilled upon completion, therefore, 24-hour stabilized groundwater readings were not obtained.

Groundwater levels are dependent on many factors and can experience seasonal fluctuations and various other fluctuations due to precipitation, construction activities and many other factors.

Summary Table

A summary of the groundwater depths, flowing sands depths, possible void depths, and the theoretical and actual grout volumes per boring are provided in Table 1 below.

Table 1: Subsurface Conditions Summary Table

Boring	Ground Water Level (ft)	Possible Void Depth (ft)	Flowing Sands Depth (ft)	Theo. Grout Volume (ft ³)	Actual Grout Volume (ft ³)
B-7	8	N/A	18-1/2 to 28-1/2	4.97	N/A
B-8	8	38-1/2 to 43-1/2	23-1/2 to 28-1/2	4.97	N/A
B-9	8	N/A	18-1/2 to 28-1/2	4.97	N/A
B-10	9-1/2	N/A	18-1/2 to 28-1/2	3.87	N/A
B-11	10-1/2	N/A	13-1/2 to 23-1/2	4.42	2.1
B-12	8-1/2	6 to 8-1/2	8-1/2 to 18-1/2	4.42	1.7



B-13	9-1/2	N/A	Not Encountered	3.87	5.9
B-14	Not Encountered	N/A	Not Encountered	1.1	11
B-15	9	N/A	13-1/2 to 18-1/2	6.63	6.5
B-16	8-1/2	3-1/2 to 6	6 to 18-1/2	6.07	7.4
B-17	Not Encountered	3-1/2 to 6	Not Encountered	1.1	1.1
B-18	9-1/2	N/A	13-1/2 to 28-1/2	3.87	4
B-19	8	N/A	13-1/2 to 18-1/2	3.87	3.8
B-20	9	N/A	13-1/2 to 18-1/2	3.87	5.4
B-21	8-1/2	N/A	18-1/2 to 28-1/2	3.87	3.9
B-22	8-1/2	N/A	18-1/2 to 28-1/2	3.31	4
B-23	Not Encountered	N/A	Not Encountered	0.55	1.1
B-24	Not Encountered	N/A	Not Encountered	0.55	1.1

CONCLUSIONS

As stated in our previous studies, we have determined that the concrete floor slab has tilted or bowed, and the tilt/bowing effect has created a noticeable heave in the terracotta floor tile in the rotunda area. Additionally, representatives of Kyzer & Timmerman structural engineers visited the City Hall site in order to visually assess the conditions of the rotunda floor. As stated in our report dated August 17, 2016, both the representatives of Kyzer & Timmerman and our personnel recommended for the safety of the occupants, based on the previous sinkhole history in the immediate area, that the building be evacuated temporarily until additional investigation and remediation efforts to stabilize the building can assure that the building is safe for occupancy.

Therefore, our personnel conducted coring and shallow hand borings within the area of the rotunda at City Hall and a hand boring behind the Fire Station #1 in order to catalogue the condition of the near-surface soils. In summary, the near-surface soils appeared to contain no obvious signs of voids beneath the slab and within the soils matrix to the depths tested. From our consultation with the structural engineer, we understood that the sudden shift in the floor slab is most likely attributable to movement or settlement of the



in-place deep foundations that has transferred to the grade-beams and conversely to the floor slab.

As recommended, our personnel returned to the site in order to further explore and document any subsurface anomalies that may be affecting the support conditions of the deep foundations beneath City Hall. We also further explored the soil conditions along the perimeter of the City Hall and Fire Station #1.

From our review of the previous and more recent subsurface studies conducted within the area of the City Hall structure, and upon review of the physical manifestations in the rotunda area of City Hall, we have determined that the previously documented “flowing” soil conditions extend underneath the City Hall structure. We have further determined that these conditions have likely contributed to the deterioration of the deep foundation soil support conditions since the time of our last study, as presented in our Report of Geotechnical Exploration and Design Services, dated May 6, 2014. Based upon our review of the available data, we have determined that the results of these latest findings confirm the conclusions and recommendations presented in our May 6, 2014 report.

Furthermore, this most recent exploration has confirmed the presence of “flowing” soil conditions along the western extremities of the Fire Station. The boring data further suggests that similar subsurface conditions exist beneath the western portion of the Fire Station structure. It is important to note that these “flowing” soil conditions were not encountered in our 2014 exploration. As stated above, the results of this most recent exploration have further confirmed the conclusions and recommendations presented in our May 6, 2014 report.

In addition to the remedial recommendations presented in our May 6, 2014 report, we, at a minimum, recommend that additional monitoring surveys be conducted by a licensed surveyor in order to catalogue the condition of the City Hall, including the floor slab in the rotunda area, and Fire Station structures, and that a structural engineer be consulted to assess the condition of the structures.

BASIS FOR RECOMMENDATIONS

The conclusions and recommendations presented in this report are based on our understanding of the project information, our interpretation of the data obtained during our research and exploration and our experience with similar soil and project conditions. The Standard penetration Test values obtained at the boring locations have been used to estimate existing soil conditions at this specific site. Regardless of the thoroughness of this investigation, it is possible that the soil conditions intermediate of the borings vary from the soil conditions encountered at the boring locations.

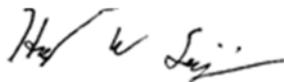


Therefore, it will be necessary for a geotechnical engineer or qualified engineering technician to be present during remedial operations in order to evaluate and document that the anticipated design conditions actually exist. GS2 Engineering, Inc. and its employees are not liable for any damages to the structure or the surrounding areas incurred during remedial activities. Nor is GS2 or its employees liable for any damages to the structures or the surrounding areas resulting from short or long term consolidation of the bearing soils due to the remedial activities conducted as a result of the recommendations outlined in this report.

CLOSING

Once again we appreciate the opportunity to provide our services for your geotechnical consulting needs. If there are any questions concerning our recommendations or if additional information becomes available, please contact us.

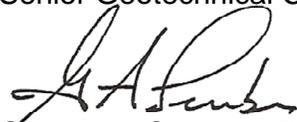
Sincerely,
GS2 ENGINEERING, INC.



Hayden W. Seignious, E.I.T.
Geotechnical Professional



Shawn J. Etier, E.I.T.
Senior Geotechnical Consultant



George A. Sembos, P.E.
Chief Engineer



APPENDIX A

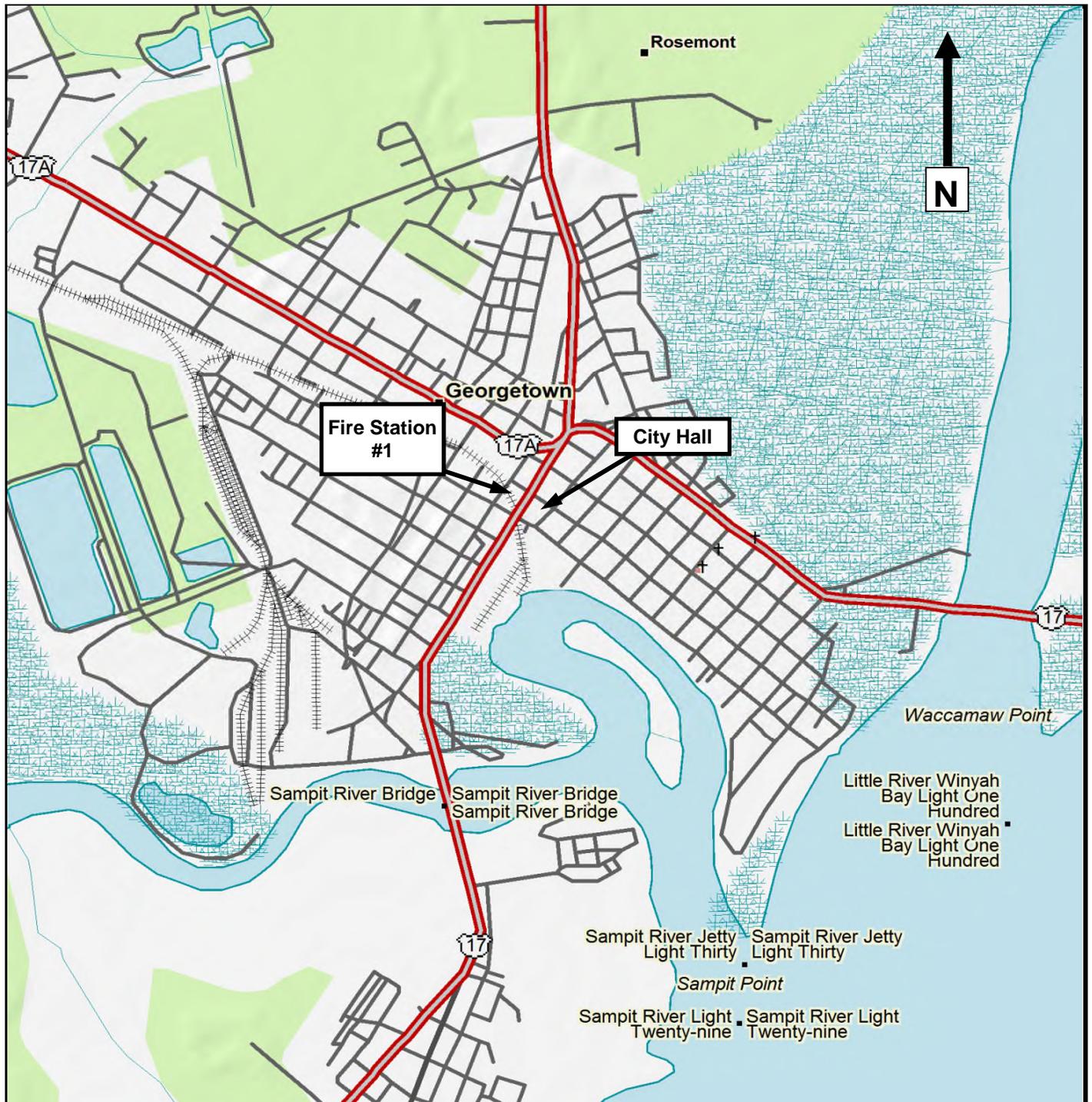
Figure 1. Site Location Map

Figure 2. USGS Topographic Map

Figure 3. Boring Location Plan II - City Hall

Figure 4. Boring Location Plan III - City Hall

Figure 5. Boring Location Plan IV - Fire Station #1



Source: Presented by DeLorme, dated 1999.

Prepared By/Date: HWS-10/16

Checked By/Date: GAS-10/16



Site Location Map

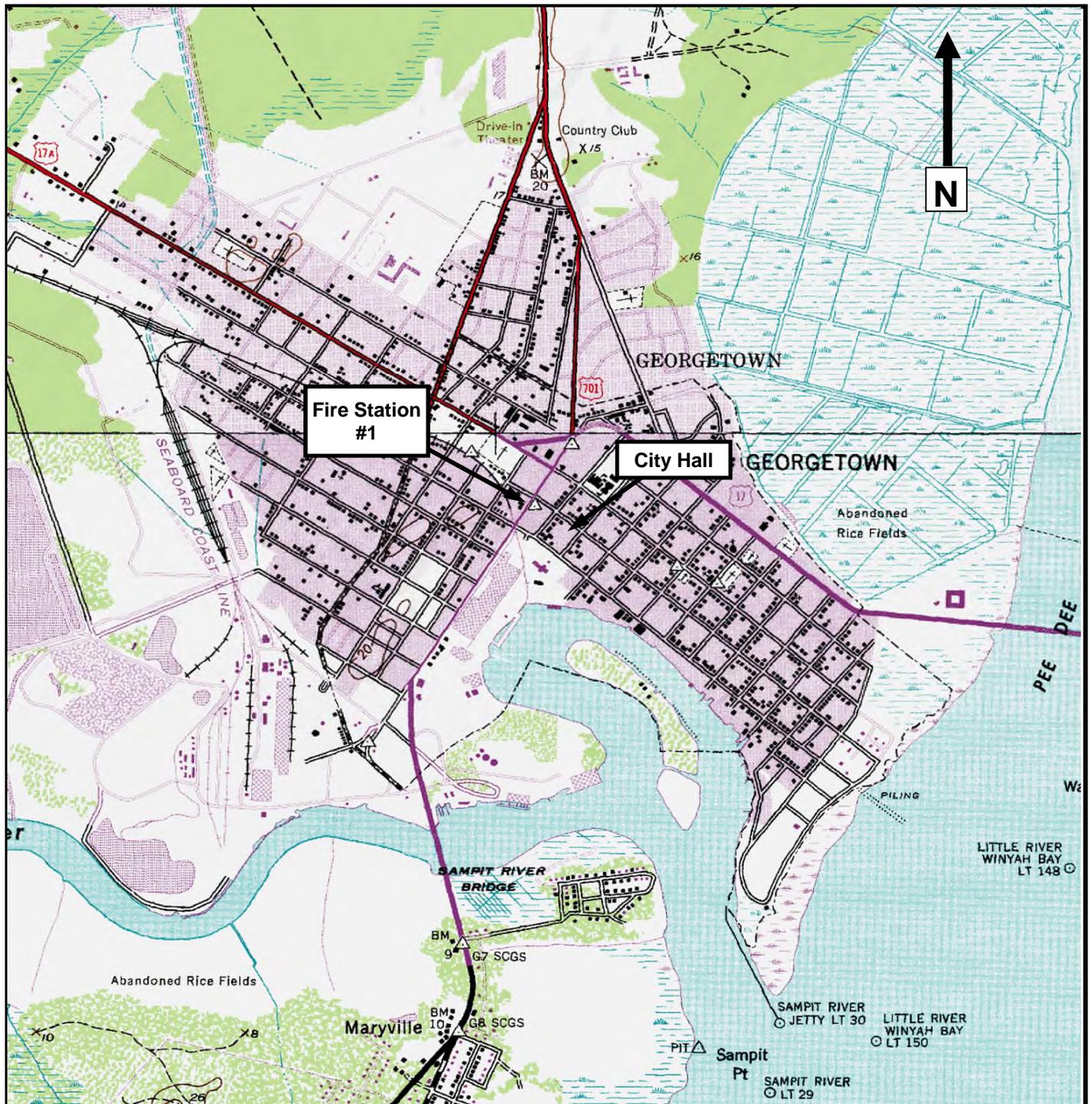
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Scale

1 inch = 2300 feet

Figure 1



Source: Presented by DeLorme, dated 1999.
USGS Georgetown South Topographical Quadrangle

Prepared By/Date: HWS-10/16
Checked By/Date: GAS-10/16

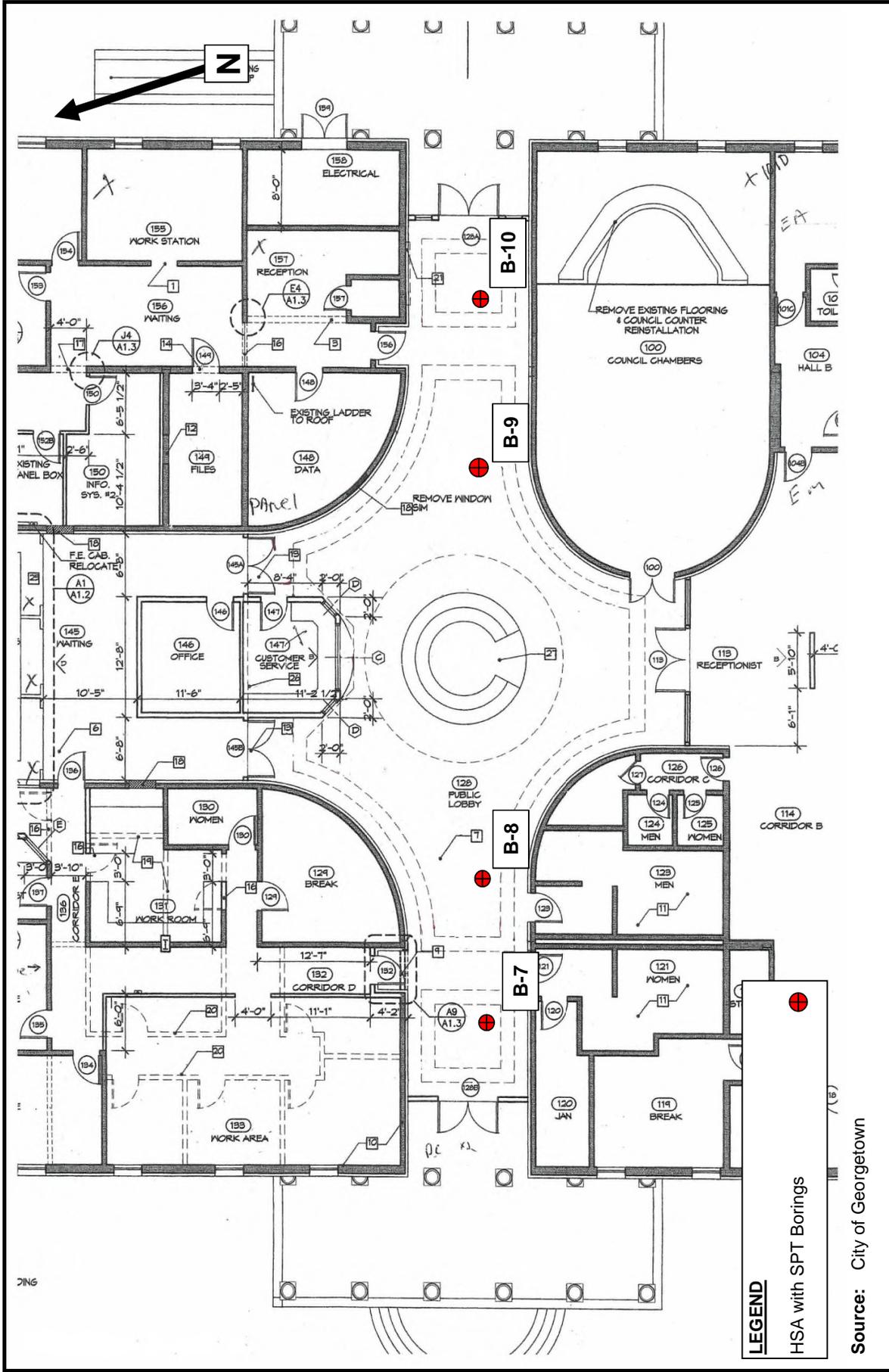


USGS Topographic Map
Existing Georgetown City Hall and Fire Station #1
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120 North Frasier Street
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Scale
1 inch = 2000 feet

Figure 2

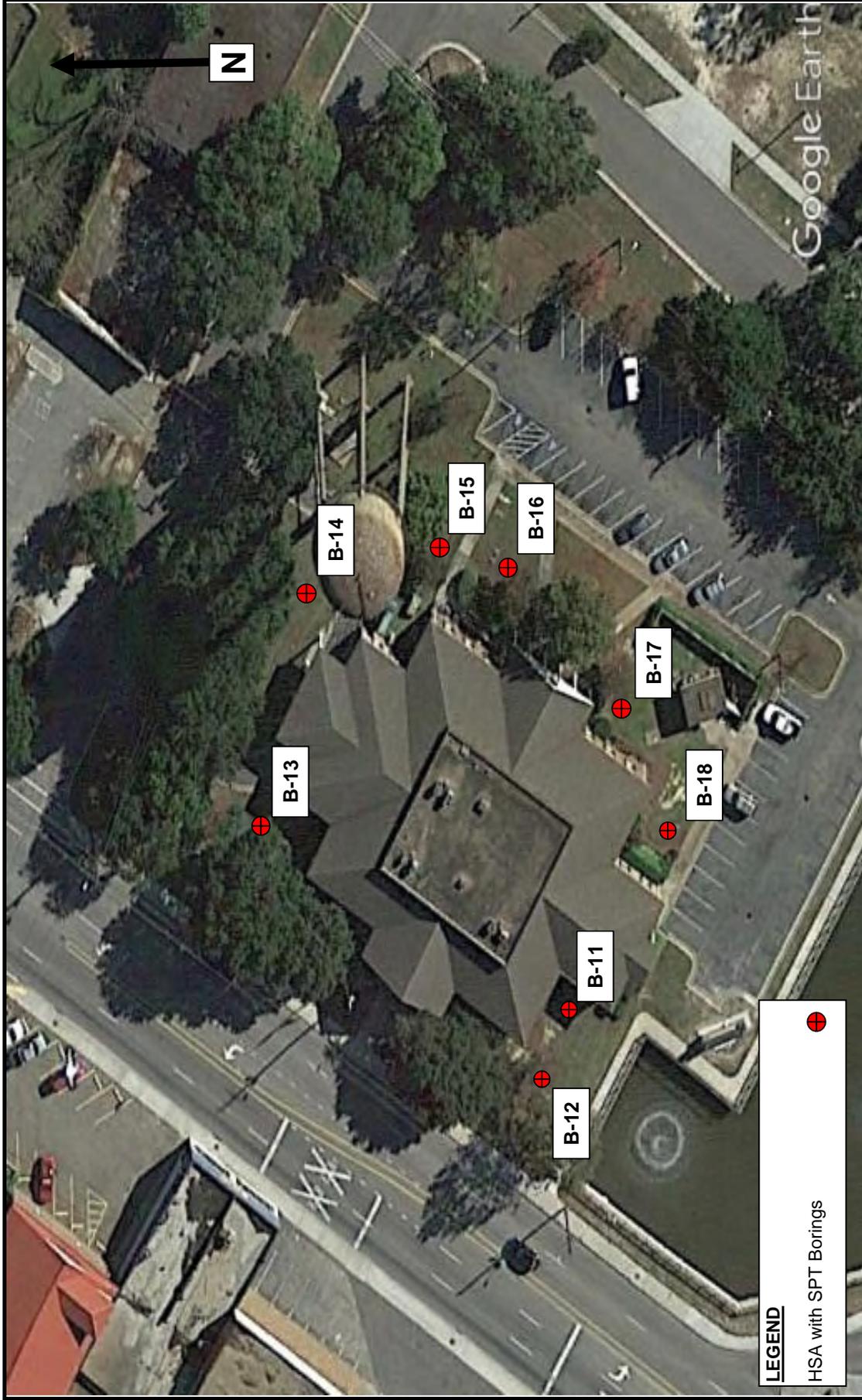


Prepared By: HWS-10/16
Checked By: GAS-10/16

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Boring Location Plan II
Existing Georgetown City Hall and Fire Station #1
GS2 Project Number 16-20251-L
120 North Fraser Street
Georgetown, South Carolina

NOT TO SCALE
Figure 3



Source: Google Earth, 2016

Prepared By\Date: HWS-10/16
Checked By\Date: GAS-10/16

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Boring Location Plan III
Existing Georgetown City Hall and Fire Station #1
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NOT TO SCALE
Figure 4



LEGEND

HSA with SPT Borings



Source: Google Earth, 2016



Boring Location Plan IV
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Prepared By\Date: HWS-10/16
 Checked By\Date: GAS-10/16

NOT TO SCALE
 Figure 5

APPENDIX B

Soil Test Boring Log Key

Soil Test Boring Logs



SOIL TEST BORING LOG KEY

COLOR SCHEME (Primary Soil Type):



SURFACE MATERIALS

Generally consist of Asphalt, Graded Aggregate Base Course, Concrete or Topsoils. Topsoils typically combine a mixture of soils and organic materials. Topsoils are typically recognized through texture and odor.



SANDS

Sands are considered to be a granular soil type with no cohesive properties. Grain sizes are categorized as fine (falls between 0.075 and 0.420 mm. in diameter), medium (falls between 0.420 and 2 mm. in diameter) or coarse (falls between 2 and 4.75 mm. in diameter).



SILTS

Silt grain sizes typically fall between 0.002 and 0.075 mm. in diameter. The Atterberg's limits for silts typically plot below the A-Line on a Plasticity Chart. Silts are typically distinguished as having a Low Plasticity (P.I. is between 0 and 22) or as having a High Plasticity (P.I. is between 22 and 59). Silts exhibit some cohesive properties.



CLAYS

Clay grain sizes typically are smaller 0.002 mm. in diameter. The Atterberg's limits for clays typically plot on or above the A-Line on a Plasticity Chart. Clays are typically distinguished as having a Low Plasticity (P.I. is between 0 and 22) or as having a High Plasticity (P.I. is between 22 and 59). Clays exhibit strong cohesive properties.



BLACK MINGO FORMATION

The Black Mingo Formation is typically grey to dark grey in color and classifies as a silty sand or sandy silt. It is composed of overconsolidated marine deposits and is highly reactive to hydrochloric acid. The Black Mingo sometimes contains cemented layers of limestone.



NO RECOVERY

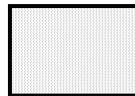
Denotes that there was no recovery in the split-spoon sampler barrel upon its retrieval from the borehole. No recovery may be due to very hard soil layers that are unable to be penetrated by the barrel or super-saturated soils that are unable to be retained in the barrel.

PATTERN SCHEME: (Secondary Soil Type)



SANDY

Denotes a soil that has a percentage of sand. The portion of the soil that is sandy in nature is considered coarse-grained. When used in conjunction with the yellow color scheme, this pattern means the soil has more than 50% retained on the No. 200 sieve (i.e 0.075 mm in diameter).



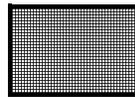
SILTY

Denotes a soil that has a percentage of silt. The portion of the soil that is silty in nature is considered fine-grained. When used in conjunction with the gray color scheme, this pattern means the soil has more than 50% passing the No. 200 sieve (i.e 0.075 mm in diameter).



CLAYEY

Denotes a soil that has a percentage of clay. The portion of the soil that is clayey in nature is considered fine-grained. When used in conjunction with the red color scheme, this pattern means the soil has more than 50% passing the No. 200 sieve (i.e 0.075 mm in diameter).



PARTIALLY WEATHERED ROCK

Denotes a soil that is considered Partially Weathered Rock (PWR). PWR is defined as residuum that exhibits SPT N-values in excess of 100 bpf



DEBRIS LADEN

Denotes a soil that is laden with debris. Debris may consist of anything man-made, including, but not limited to, house hold trash, construction debris (concrete, brick, metal, etc.) or may consist of natural debris, such as organics. Depending on the severity and type of the debris, these materials may require excavation and replacement.



OLD FILL

Denotes a soil that is assumed or known to be previously placed, possibly untested, old fill. As there is no known record of its placement, these soils are undocumented, and may require excavation and replacement.

Note:

The above detailed color schemes are indicative of the predominant primary soil type observed in the indicated soil strata at the Boring locations for the subject site. Secondary soil types are detailed by the pattern scheme. Both the color and pattern scheme are detailed in the Remarks column of the SOIL TEST BORING LOG. All soil descriptions are based on visual and textural properties observed in the recovered soils. No laboratory tests were performed on the soils described in this report, unless noted within the remarks column of the logs.

SOIL TEST BORING LOG

Project Name: Existing Georgetown City Hall and Fire Station #1

Project Number: 16-20251-L

Date of Test: September 30, 2016



Boring Number: B-7

Depth (feet)	Soil Description	Sample Interval	Blow Counts*	Remarks
1	SURFACE MATERIALS: 9" Concrete slab			
2	COASTAL PLAINS: Firm to Loose Tan/Grey Poorly Graded SAND. (SP) <i>Possible Fill Material</i>	0 to 1-1/2'	12	
3				
4				
5				
6	Loose Grey/Orange Poorly Graded SAND. (SP) <i>Possible Fill Material</i>	3-1/2" to 5'	8	MOIST
7				
8				
9	Very Loose Grey/Orange Clayey SAND. (SC)	6' to 7-1/2'	10	MOIST
10				
11				
12				
13				
14	No Recovery	8-1/2' to 10'	4	WET
15				
16				
17				
18	Very Firm Grey Poorly Graded SAND w/ shell fragments. (SP) <i>Flowing Sands</i>	13-1/2' to 15'	13	
19				
20				
21				
22				
23				
24				
25		23-1/2' to 25'	24	

Depth of Boring (ft): 45 Feet

Location of Boring: see Boring Location Plan

Depth of Groundwater T.O.B. (feet): 8 Feet

Method of Drilling: Hollow Stem Auger

Depth of Groundwater 24 hrs. (feet): Not Available

Performed By: GS2 Drilling

* The Blow Counts given above are recorded for a 140 pound hammer (falling 30 inches/blow) to drive a 2 inch O.D., 1.375 inch I.D. split-barrel sampler 12 inches, after an initial 6 inch seating increment.

SOIL TEST BORING LOG



Project Name: Existing Georgetown City Hall and Fire Station #1

Project Number: 16-20251-L

Date of Test: September 30, 2016

Boring Number: B-7 (continued)

Depth (feet)	Soil Description	Sample Interval	Blow Counts*	Remarks
26continued Very Firm Grey Poorly Graded SAND w/ shell fragments. (SP) <i>Flowing Sands</i>			
27				
28				
29	Dense to Very Dense Dark Grey Silty SAND w/ limestone. (SM)			
30		28-1/2' to 30'	44	
31				
32				
33				
34				
35		33-1/2' to 35'	50/5"	
36				
37				
38				
39	Very Dense Grey Silty SAND w/ limestone. (SM)			
40		38-1/2' to 40'	50/4"	
41				
42				
43				
44				
45		43-1/2' to 45'	50/3"	

Boring Refusal at 45 Feet.

Depth of Boring (ft): 45 Feet

Location of Boring: see Boring Location Plan

Depth of Groundwater T.O.B. (feet): 8 Feet

Method of Drilling: Hollow Stem Auger

Depth of Groundwater 24 hrs. (feet): Not Available

Performed By: GS2 Drilling

* The Blow Counts given above are recorded for a 140 pound hammer (falling 30 inches/blow) to drive a 2 inch O.D., 1.375 inch I.D. split-barrel sampler 12 inches, after an initial 6 inch seating increment.

SOIL TEST BORING LOG

Project Name: Existing Georgetown City Hall and Fire Station #1

Project Number: 16-20251-L

Date of Test: October 1, 2016



Boring Number: B-8

Depth (feet)	Soil Description	Sample Interval	Blow Counts*	Remarks
1	SURFACE MATERIALS: 9" Concrete slab			
2	COASTAL PLAINS: Firm to Loose Tan/Orange Poorly Graded SAND. (SP) <i>Possible Fill Material</i>	0 to 1-1/2'	15	
3				
4				
5		3-1/2" to 5'	12	MOIST
6				
7				
8		6' to 7-1/2'	7	MOIST GW @ T.O.B.
9		Loose Grey Silty SAND w/ shell fragments. (SM)	8-1/2' to 10'	6
10				
11				
12				
13				
14	Firm to Very Firm Grey Poorly Graded SAND w/ shell fragments. (SP)	13-1/2' to 15'	16	
15				
16				
17				
18				
19		18-1/2' to 20'	25	
20				
21				
22				
23				
24	Loose Grey Poorly Graded SAND w/ shell fragments. (SP) <i>Flowing Sands</i>	23-1/2' to 25'	8	
25				

Depth of Boring (ft): 45 Feet

Location of Boring: see Boring Location Plan

Depth of Groundwater T.O.B. (feet): 8 Feet

Method of Drilling: Hollow Stem Auger

Depth of Groundwater 24 hrs. (feet): Not Available

Performed By: GS2 Drilling

* The Blow Counts given above are recorded for a 140 pound hammer (falling 30 inches/blow) to drive a 2 inch O.D., 1.375 inch I.D. split-barrel sampler 12 inches, after an initial 6 inch seating increment.

SOIL TEST BORING LOG



Project Name: Existing Georgetown City Hall and Fire Station #1

Project Number: 16-20251-L

Date of Test: October 1, 2016

Boring Number: B-8 (continued)

Depth (feet)	Soil Description	Sample Interval	Blow Counts*	Remarks
26continued Loose Grey Poorly Graded SAND w/ shell fragments. (SP) <i>Flowing Sands</i>			
27				
28				
29	Very Dense Dark Grey Silty SAND w/ limestone fragments. (SM)	28-1/2' to 30'	50/2"	
30				
31				
32				
33				
34				
35				
36		33-1/2' to 35'	50/4"	
37				
38				
39	Very Loose Dark Grey Silty SAND. (SM) <i>Possible Void</i>			
40				
41		38-1/2' to 40'	W.O.H.	
42				
43				
44	Very Dense Grey Silty SAND w/ limestone. (SM)			
45		43-1/2' to 45'	50/3"	

Boring Refusal at 45 Feet.

Depth of Boring (ft): 45 Feet

Location of Boring: see Boring Location Plan

Depth of Groundwater T.O.B. (feet): 8 Feet

Method of Drilling: Hollow Stem Auger

Depth of Groundwater 24 hrs. (feet): Not Available

Performed By: GS2 Drilling

* The Blow Counts given above are recorded for a 140 pound hammer (falling 30 inches/blow) to drive a 2 inch O.D., 1.375 inch I.D. split-barrel sampler 12 inches, after an initial 6 inch seating increment.

SOIL TEST BORING LOG

Project Name: Existing Georgetown City Hall and Fire Station #1

Project Number: 16-20251-L

Date of Test: October 1, 2016



Boring Number: B-9

Depth (feet)	Soil Description	Sample Interval	Blow Counts*	Remarks
1	SURFACE MATERIALS: 9" Concrete slab			
1	COASTAL PLAINS: Firm Tan/Orange Poorly Graded SAND. (SP)	0 to 1-1/2'	20	
	Possible Fill Material			
2				
3				
4				
5		3-1/2" to 5'	14	MOIST
6				
7				
8		6' to 7-1/2'	13	MOIST GW @ T.O.B.
9	Loose Grey/Tan Silty SAND. (SM)	8-1/2' to 10'	6	
10				
11				
12				
13				
14	Firm Grey/Orange Clayey SAND. (SC)	13-1/2' to 15'	18	
15				
16				
17				
18				
19	Very Firm Grey/Orange Poorly Graded SAND. (SP)	18-1/2' to 20'	26	
	Flowing Sands			
20				
21				
22				
23				
24	No Recovery	23-1/2' to 25'	24	
	Flowing Sands			
25				

Depth of Boring (ft): 45 Feet

Location of Boring: see Boring Location Plan

Depth of Groundwater T.O.B. (feet): 8 Feet

Method of Drilling: Hollow Stem Auger

Depth of Groundwater 24 hrs. (feet): Not Available

Performed By: GS2 Drilling

* The Blow Counts given above are recorded for a 140 pound hammer (falling 30 inches/blow) to drive a 2 inch O.D., 1.375 inch I.D. split-barrel sampler 12 inches, after an initial 6 inch seating increment.

SOIL TEST BORING LOG



Project Name: Existing Georgetown City Hall and Fire Station #1

Project Number: 16-20251-L

Date of Test: October 1, 2016

Boring Number: B-9 (continued)

Depth (feet)	Soil Description	Sample Interval	Blow Counts*	Remarks
26continued No Recovery			X
27	Flowing Sands			
28				
29	Very Dense Orange/Tan Poorly Graded SAND w/ shell fragments. (SP)			
30		28-1/2' to 30'	50/4"	
31				
32				
33				
34	Very Dense Grey Silty SAND w/ limestone. (SM)	33-1/2' to 35'	50/4"	
35				
36				
37				
38		38-1/2' to 40'	62	
39				
40				
41				
42		43-1/2' to 45'	50/2"	
43				
44				
45				

Boring Refusal at 45 Feet.

Depth of Boring (ft): 45 Feet

Location of Boring: see Boring Location Plan

Depth of Groundwater T.O.B. (feet): 8 Feet

Method of Drilling: Hollow Stem Auger

Depth of Groundwater 24 hrs. (feet): Not Available

Performed By: GS2 Drilling

* The Blow Counts given above are recorded for a 140 pound hammer (falling 30 inches/blow) to drive a 2 inch O.D., 1.375 inch I.D. split-barrel sampler 12 inches, after an initial 6 inch seating increment.

SOIL TEST BORING LOG

Project Name: Existing Georgetown City Hall and Fire Station #1

Project Number: 16-20251-L

Date of Test: October 2, 2016



Boring Number: B-10

Depth (feet)	Soil Description	Sample Interval	Blow Counts*	Remarks	
1	SURFACE MATERIALS: 9" Concrete slab				
2	COASTAL PLAINS: Firm Tan/Orange Poorly Graded SAND. (SP) <i>Possible Fill Material</i>	0 to 1-1/2'	15		
3					
4					
5					
6					
7	3-1/2" to 5'	13		MOIST	
8				MOIST	
9					
10	Loose Dark Grey Clayey SAND. (SC)	8-1/2' to 10'	6		
11					
12					
13					
14	Firm Grey/Tan Poorly Graded SAND w/ shell fragments. (SP)	13-1/2' to 15'	15		
15					
16					
17					
18	Firm Grey/Tan Poorly Graded SAND w/ shell fragments. (SP) <i>Flowing Sands</i>	18-1/2' to 20'	17		
19					
20					
21					
22					
23	No Recovery <i>Flowing Sands</i>	23-1/2' to 25'	14		
24					
25					

Depth of Boring (ft): 35 Feet

Location of Boring: see Boring Location Plan

Depth of Groundwater T.O.B. (feet): 9-1/2 Feet

Method of Drilling: Hollow Stem Auger

Depth of Groundwater 24 hrs. (feet): Not Available

Performed By: GS2 Drilling

* The Blow Counts given above are recorded for a 140 pound hammer (falling 30 inches/blow) to drive a 2 inch O.D., 1.375 inch I.D. split-barrel sampler 12 inches, after an initial 6 inch seating increment.

SOIL TEST BORING LOG



Project Name: Existing Georgetown City Hall and Fire Station #1

Project Number: 16-20251-L

Date of Test: October 2, 2016

Boring Number: B-10 (continued)

Depth (feet)	Soil Description	Sample Interval	Blow Counts*	Remarks
26continued No Recovery	28-1/2' to 30'	50/4"	<div style="font-size: 4em; font-weight: bold;">X</div>
27	Flowing Sands			
28				
29	Very Dense Dark Grey Silty SAND w/ limestone. (SM)			
30				
31				
32				
33				
34		33-1/2' to 35'	50/1"	
35				

Boring Refusal at 35 Feet.

Depth of Boring (ft): 35 Feet

Location of Boring: see Boring Location Plan

Depth of Groundwater T.O.B. (feet): 9-1/2 Feet

Method of Drilling: Hollow Stem Auger

Depth of Groundwater 24 hrs. (feet): Not Available

Performed By: GS2 Drilling

* The Blow Counts given above are recorded for a 140 pound hammer (falling 30 inches/blow) to drive a 2 inch O.D., 1.375 inch I.D. split-barrel sampler 12 inches, after an initial 6 inch seating increment.

SOIL TEST BORING LOG

Project Name: Existing Georgetown City Hall and Fire Station #1

Project Number: 16-20251-L

Date of Test: October 29, 2016



Boring Number: B-11

Depth (feet)	Soil Description	Sample Interval	Blow Counts*	Remarks
1	SURFACE MATERIALS: 5" Topsoil			
2	COASTAL PLAINS: Very Loose to Loose Brown/Grey Silty SAND. (SM) <i>Possible Fill Material</i>	0 to 1-1/2'	4	
3				
4				
5				
6				
7				Firm Grey/Orange Clayey SAND. (SC)
8				
9				
10				
11				
12				
13	Very Firm Grey Poorly Graded SAND. (SP) <i>Flowing Sands</i>	6' to 7-1/2'	13	MOIST
14				
15				
16				
17				
18				
19	Very Dense Orange Poorly Graded SAND w/ shell fragments. (SP) <i>Flowing Sands</i>	8-1/2' to 10'	14	WET GW @ T.O.B.
20				
21				
22				
23				
24				Loose Dark Grey Silty SAND. (SM)
25				
25		18-1/2' to 20'	61	
25		23-1/2' to 25'	7	

Depth of Boring (ft): 40 Feet

Location of Boring: see Boring Location Plan

Depth of Groundwater T.O.B. (feet): 10-1/2 Feet

Method of Drilling: Hollow Stem Auger

Depth of Groundwater 24 hrs. (feet): Not Available

Performed By: Smith Drilling, Inc.

* The Blow Counts given above are recorded for a 140 pound hammer (falling 30 inches/blow) to drive a 2 inch O.D., 1.375 inch I.D. split-barrel sampler 12 inches, after an initial 6 inch seating increment.

SOIL TEST BORING LOG



Project Name: Existing Georgetown City Hall and Fire Station #1

Project Number: 16-20251-L

Date of Test: October 2, 2016

Boring Number: B-11 (continued)

Depth (feet)	Soil Description	Sample Interval	Blow Counts*	Remarks
26continued Loose Dark Grey Silty SAND. (SM)			
27				
28				
29	Very Dense Dark Grey Silty SAND w/ limestone. (SM)			
30		28-1/2' to 30'	50/3"	
31				
32				
33				
34				
35		33-1/2' to 35'	50/3"	
36				
37				
38				
39				
40		38-1/2' to 40'	50/2"	

Boring Refusal at 40 Feet.

Depth of Boring (ft): 40 Feet

Location of Boring: see Boring Location Plan

Depth of Groundwater T.O.B. (feet): 10-1/2 Feet

Method of Drilling: Hollow Stem Auger

Depth of Groundwater 24 hrs. (feet): Not Available

Performed By: Smith Drilling, Inc.

* The Blow Counts given above are recorded for a 140 pound hammer (falling 30 inches/blow) to drive a 2 inch O.D., 1.375 inch I.D. split-barrel sampler 12 inches, after an initial 6 inch seating increment.

SOIL TEST BORING LOG

Project Name: Existing Georgetown City Hall and Fire Station #1

Project Number: 16-20251-L

Date of Test: October 29, 2016



Boring Number: B-12

Depth (feet)	Soil Description	Sample Interval	Blow Counts*	Remarks
1	SURFACE MATERIALS: 6" Topsoil	0 to 1-1/2'	5	
2	COASTAL PLAINS: Loose Grey Silty SAND. (SM)			
3	Possible Fill Material			
4				
5				
6				
7	Very Loose Grey/Orange Clayey SAND. (SC)	3-1/2" to 5'	6	MOIST
8	Possible Void			
9	No Recovery			
10	Flowing Sands	6' to 7-1/2'	1	MOIST GW @ T.O.B.
11				
12				
13				
14				
15	Firm Grey Poorly Graded SAND. (SP)	8-1/2' to 10'	12	X
16	Flowing Sands			
17				
18				
19				
20				
21	Very Dense Orange Poorly Graded SAND w/ shell fragments. (SP)	13-1/2' to 15'	16	WET
22				
23				
24				
25				
24	Firm Grey Silty SAND w/ shell fragments. (SM)	18-1/2' to 20'	57	
25				
		23-1/2' to 25'	14	

Depth of Boring (ft): 40 Feet

Location of Boring: see Boring Location Plan

Depth of Groundwater T.O.B. (feet): 8-1/2 Feet

Method of Drilling: Hollow Stem Auger

Depth of Groundwater 24 hrs. (feet): Not Available

Performed By: Smith Drilling, Inc.

* The Blow Counts given above are recorded for a 140 pound hammer (falling 30 inches/blow) to drive a 2 inch O.D., 1.375 inch I.D. split-barrel sampler 12 inches, after an initial 6 inch seating increment.

SOIL TEST BORING LOG



Project Name: Existing Georgetown City Hall and Fire Station #1

Project Number: 16-20251-L

Date of Test: October 2, 2016

Boring Number: B-12 (continued)

Depth (feet)	Soil Description	Sample Interval	Blow Counts*	Remarks
26continued Firm Grey Silty SAND w/ shell fragments. (SM)			
27				
28				
29	Very Dense Dark Grey Silty SAND w/ limestone. (SM)			
30		28-1/2' to 30'	50/4"	
31				
32				
33				
34				
35		33-1/2' to 35'	50/4"	
36				
37				
38				
39				
40		38-1/2' to 40'	50/4"	

Boring Refusal at 40 Feet.

Depth of Boring (ft): 40 Feet

Location of Boring: see Boring Location Plan

Depth of Groundwater T.O.B. (feet): 8-1/2 Feet

Method of Drilling: Hollow Stem Auger

Depth of Groundwater 24 hrs. (feet): Not Available

Performed By: Smith Drilling, Inc.

* The Blow Counts given above are recorded for a 140 pound hammer (falling 30 inches/blow) to drive a 2 inch O.D., 1.375 inch I.D. split-barrel sampler 12 inches, after an initial 6 inch seating increment.

SOIL TEST BORING LOG

Project Name: Existing Georgetown City Hall and Fire Station #1

Project Number: 16-20251-L

Date of Test: October 30, 2016



Boring Number: B-13

Depth (feet)	Soil Description	Sample Interval	Blow Counts*	Remarks
1	SURFACE MATERIALS: 5" Topsoil	0 to 1-1/2'	3	
2	COASTAL PLAINS: Very Loose Grey Silty SAND. (SM) <i>Possible Fill Material</i>			
3				
4	Very Loose Tan/Grey Silty SAND. (SM)	3-1/2" to 5'	4	MOIST
5				
6				
7	Loose Orange/Brown Clayey SAND. (SC)	6' to 7-1/2'	10	MOIST
8				
9	Dense Orange/Brown Clayey SAND. (SC)			
10		8-1/2' to 10'	32	GW @ T.O.B. WET
11				
12				
13				
14				
15	Dense Grey Poorly Graded SAND. (SP)	13-1/2' to 15'	34	
16				
17				
18				
19				
20	Dense Orange Poorly Graded SAND w/ shell fragments. (SP)	18-1/2' to 20'	32	
21				
22				
23				
24	Loose Grey Silty SAND w/ shell fragments. (SM)			
25		23-1/2' to 25'	10	

Depth of Boring (ft): 35 Feet

Location of Boring: see Boring Location Plan

Depth of Groundwater T.O.B. (feet): 9-1/2 Feet

Method of Drilling: Hollow Stem Auger

Depth of Groundwater 24 hrs. (feet): Not Available

Performed By: Smith Drilling, Inc.

* The Blow Counts given above are recorded for a 140 pound hammer (falling 30 inches/blow) to drive a 2 inch O.D., 1.375 inch I.D. split-barrel sampler 12 inches, after an initial 6 inch seating increment.

SOIL TEST BORING LOG



Project Name: Existing Georgetown City Hall and Fire Station #1

Project Number: 16-20251-L

Date of Test: October 30, 2016

Boring Number: B-13 (continued)

Depth (feet)	Soil Description	Sample Interval	Blow Counts*	Remarks
26continued Loose Grey Silty SAND w/ shell fragments. (SM)	28-1/2' to 30'	50/2"	
27				
28				
29	Very Dense Dark Grey Silty SAND w/ limestone. (SM)			
30				
31				
32				
33				
34		33-1/2' to 35'	50/2"	
35				

Boring Refusal at 35 Feet.

Depth of Boring (ft): 35 Feet

Location of Boring: see Boring Location Plan

Depth of Groundwater T.O.B. (feet): 9-1/2 Feet

Method of Drilling: Hollow Stem Auger

Depth of Groundwater 24 hrs. (feet): Not Available

Performed By: Smith Drilling, Inc.

* The Blow Counts given above are recorded for a 140 pound hammer (falling 30 inches/blow) to drive a 2 inch O.D., 1.375 inch I.D. split-barrel sampler 12 inches, after an initial 6 inch seating increment.

SOIL TEST BORING LOG

Project Name: Existing Georgetown City Hall and Fire Station #1

Project Number: 16-20251-L

Date of Test: October 29, 2016



Boring Number: B-14

Depth (feet)	Soil Description	Sample Interval	Blow Counts*	Remarks
1	SURFACE MATERIALS: 3" Topsoil	0 to 1-1/2'	17	
2	COASTAL PLAINS: Firm to Loose Brown Silty SAND w/ trace roots. (SM) <i>Possible Fill Material</i>			
3				
4				
5				
6				
7	Loose to Firm Brown Silty SAND w/ masonry debris. (SM)	3-1/2" to 5'	10	MOIST
8				
9				
10				
		6' to 7-1/2'	9	MOIST
		8-1/2' to 10'	15	WET

Boring Refusal at 10 Feet.

Depth of Boring (ft): 10 Feet

Location of Boring: see Boring Location Plan

Depth of Groundwater T.O.B. (feet): Not Encountered

Method of Drilling: Hollow Stem Auger

Depth of Groundwater 24 hrs. (feet): Not Available

Performed By: GS2 Drilling

* The Blow Counts given above are recorded for a 140 pound hammer (falling 30 inches/blow) to drive a 2 inch O.D., 1.375 inch I.D. split-barrel sampler 12 inches, after an initial 6 inch seating increment.

SOIL TEST BORING LOG

Project Name: Existing Georgetown City Hall and Fire Station #1

Project Number: 16-20251-L

Date of Test: October 21, 2016



Boring Number: B-15

Depth (feet)	Soil Description	Sample Interval	Blow Counts*	Remarks
1	SURFACE MATERIALS: 5" Topsoil			
2	COASTAL PLAINS: Loose Brown/Tan Silty SAND. (SM) <i>Possible Fill Material</i>	0 to 1-1/2'	9	
3				
4	Loose to Very Loose Brown Silty SAND w/ construction debris. (SM)			
5		3-1/2" to 5'	5	MOIST
6				
7				
8		6' to 7-1/2'	W.O.H.	MOIST
9				GW @ T.O.B.
10		8-1/2' to 10'	1	WET
11				
12				
13				
14	Loose Grey Poorly Graded SAND. (SP) <i>Flowing Sands</i>			
15		13-1/2' to 15'	9	
16				
17				
18				
19	Very Firm Orange Poorly Graded SAND w/ shell fragments. (SP)			
20		18-1/2' to 20'	30	
21				
22				
23				
24	Very Firm Grey Poorly Graded SAND w/ shell fragments. (SP)			
25		23-1/2' to 25'	29	

Depth of Boring (ft): 60 Feet

Location of Boring: see Boring Location Plan

Depth of Groundwater T.O.B. (feet): 9 Feet

Method of Drilling: Hollow Stem Auger

Depth of Groundwater 24 hrs. (feet): Not Available

Performed By: GS2 Drilling

* The Blow Counts given above are recorded for a 140 pound hammer (falling 30 inches/blow) to drive a 2 inch O.D., 1.375 inch I.D. split-barrel sampler 12 inches, after an initial 6 inch seating increment.

SOIL TEST BORING LOG

Project Name: Existing Georgetown City Hall and Fire Station #1

Project Number: 16-20251-L

Date of Test: October 21, 2016



Boring Number: B-15 (continued)

Depth (feet)	Soil Description	Sample Interval	Blow Counts*	Remarks
26continued Very Firm Grey Poorly Graded SAND w/ shell fragments. (SP)			
27				
28				
29	Very Dense Grey Poorly Graded SAND w/ shell fragments. (SP)			
30		28-1/2' to 30'	50/3"	
31				
32				
33				
34	No Recovery	33-1/2' to 35'	50/2"	X
35				
36				
37				
38		38-1/2' to 40'	50/3"	X
39				
40				
41				
42		43-1/2' to 45'	50	
43				
44	Dense to Very Dense Grey Poorly Graded SAND w/ shell fragments. (SP)			
45				
46		48-1/2' to 50'	54	
47				
48				
49				
50				

Depth of Boring (ft): 60 Feet

Location of Boring: see Boring Location Plan

Depth of Groundwater T.O.B. (feet): 9 Feet

Method of Drilling: Hollow Stem Auger

Depth of Groundwater 24 hrs. (feet): Not Available

Performed By: Smith Drilling, Inc.

* The Blow Counts given above are recorded for a 140 pound hammer (falling 30 inches/blow) to drive a 2 inch O.D., 1.375 inch I.D. split-barrel sampler 12 inches, after an initial 6 inch seating increment.

SOIL TEST BORING LOG

Project Name: Existing Georgetown City Hall and Fire Station #1

Project Number: 16-20251-L

Date of Test: October 21, 2016



Boring Number: B-15 (continued)

Depth (feet)	Soil Description	Sample Interval	Blow Counts*	Remarks
51continued Dense to Very Dense Grey Poorly Graded SAND w/ shell fragments. (SP)	53-1/2" to 55'	17	
52				
53				
54				
55				
56				
57				
58				
59				
60				
60	Firm Dark Grey/Olive Silty SAND. (SM) <i>Locally referred to as the Pee Dee Formation.</i>	58-1/2' to 60'	15	

Boring Terminated at 60 Feet.

Depth of Boring (ft): 60 Feet

Location of Boring: see Boring Location Plan

Depth of Groundwater T.O.B. (feet): 9 Feet

Method of Drilling: Hollow Stem Auger

Depth of Groundwater 24 hrs. (feet): Not Available

Performed By: GS2 Drilling

* The Blow Counts given above are recorded for a 140 pound hammer (falling 30 inches/blow) to drive a 2 inch O.D., 1.375 inch I.D. split-barrel sampler 12 inches, after an initial 6 inch seating increment.

SOIL TEST BORING LOG

Project Name: Existing Georgetown City Hall and Fire Station #1

Project Number: 16-20251-L

Date of Test: October 29, 2016



Boring Number: B-16

Depth (feet)	Soil Description	Sample Interval	Blow Counts*	Remarks
1	SURFACE MATERIALS: 7" Topsoil	0 to 1-1/2'	6	
2	COASTAL PLAINS: Loose Grey/Brown Silty SAND. (SM)			
3	Possible Fill Material			
4	No Recovery			
5	Possible Void	3-1/2" to 5'	W.O.H.	X
6				
7	Very Loose Grey Poorly Graded SAND. (SP)			
8	Flowing Sands	6' to 7-1/2'	1	MOIST GW @ T.O.B.
9	No Recovery	8-1/2' to 10'	3	X
10	Flowing Sands			
11				
12				
13				
14	Loose Grey/Brown Poorly Graded SAND. (SP)	13-1/2' to 15'	6	WET
15	Flowing Sands			
16				
17				
18				
19	Firm Dark Grey Silty SAND. (SM)	18-1/2' to 20'	12	
20				
21				
22				
23				
24	Firm Orange Poorly Graded SAND w/ shell fragments. (SP)	23-1/2' to 25'	13	
25				

Depth of Boring (ft): 55 Feet

Location of Boring: see Boring Location Plan

Depth of Groundwater T.O.B. (feet): 8-1/2 Feet

Method of Drilling: Hollow Stem Auger

Depth of Groundwater 24 hrs. (feet): Not Available

Performed By: GS2 Drilling

* The Blow Counts given above are recorded for a 140 pound hammer (falling 30 inches/blow) to drive a 2 inch O.D., 1.375 inch I.D. split-barrel sampler 12 inches, after an initial 6 inch seating increment.

SOIL TEST BORING LOG



Project Name: Existing Georgetown City Hall and Fire Station #1

Project Number: 16-20251-L

Date of Test: October 29, 2016

Boring Number: B-16 (continued)

Depth (feet)	Soil Description	Sample Interval	Blow Counts*	Remarks
26continued Firm Orange Poorly Graded SAND w/ shell fragments. (SP)			
27				
28				
29	Very Dense Dark Grey Silty SAND w/ limestone. (SM)			
30		28-1/2' to 30'	50/4"	
31				
32				
33				
34				
35		33-1/2' to 35'	58	
36				
37				
38				
39				
40		38-1/2' to 40'	79	
41				
42				
43				
44				
45		43-1/2' to 45'	50/4"	
46				
47				
48				
49				
50		48-1/2' to 50'	50/4"	

Depth of Boring (ft): 55 Feet

Location of Boring: see Boring Location Plan

Depth of Groundwater T.O.B. (feet): 8-1/2 Feet

Method of Drilling: Hollow Stem Auger

Depth of Groundwater 24 hrs. (feet): Not Available

Performed By: Smith Drilling, Inc.

* The Blow Counts given above are recorded for a 140 pound hammer (falling 30 inches/blow) to drive a 2 inch O.D., 1.375 inch I.D. split-barrel sampler 12 inches, after an initial 6 inch seating increment.

SOIL TEST BORING LOG



Project Name: Existing Georgetown City Hall and Fire Station #1

Project Number: 16-20251-L

Date of Test: October 29, 2016

Boring Number: B-16 (continued)

Depth (feet)	Soil Description	Sample Interval	Blow Counts*	Remarks
51continued Very Dense Dark Grey Silty SAND w/ limestone. (SM)			
52				
53				
54	No Recovery			
55				53-1/2" to 55'

Boring Refusal at 55 Feet.

Depth of Boring (ft): 55 Feet

Location of Boring: see Boring Location Plan

Depth of Groundwater T.O.B. (feet): 8-1/2 Feet

Method of Drilling: Hollow Stem Auger

Depth of Groundwater 24 hrs. (feet): Not Available

Performed By: GS2 Drilling

* The Blow Counts given above are recorded for a 140 pound hammer (falling 30 inches/blow) to drive a 2 inch O.D., 1.375 inch I.D. split-barrel sampler 12 inches, after an initial 6 inch seating increment.

SOIL TEST BORING LOG

Project Name: Existing Georgetown City Hall and Fire Station #1

Project Number: 16-20251-L

Date of Test: October 29, 2016



Boring Number: B-17

Depth (feet)	Soil Description	Sample Interval	Blow Counts*	Remarks
1	SURFACE MATERIALS: 3" Topsoil	0 to 1-1/2'	2	
2	COASTAL PLAINS: Very Loose Dark Grey Silty SAND. (SM)			
3	Possible Fill Material			
4	No Recovery			
5	Possible Void	3-1/2" to 5'	1	
6				
7	Very Loose Grey Poorly Graded SAND. (SP)			
8		6' to 7-1/2'	4	
9	Firm Dark Grey Silty SAND w/ debris and possible petrol contamination. (SM)			
10		8-1/2' to 10'	11	

Boring Abandoned at 10 Feet.

Depth of Boring (ft): 10 Feet

Location of Boring: see Boring Location Plan

Depth of Groundwater T.O.B. (feet): Not Encountered

Method of Drilling: Hollow Stem Auger

Depth of Groundwater 24 hrs. (feet): Not Available

Performed By: Smith Drilling, Inc.

* The Blow Counts given above are recorded for a 140 pound hammer (falling 30 inches/blow) to drive a 2 inch O.D., 1.375 inch I.D. split-barrel sampler 12 inches, after an initial 6 inch seating increment.

SOIL TEST BORING LOG

Project Name: Existing Georgetown City Hall and Fire Station #1

Project Number: 16-20251-L

Date of Test: October 30, 2016



Boring Number: B-18

Depth (feet)	Soil Description	Sample Interval	Blow Counts*	Remarks
1	SURFACE MATERIALS: 6" Topsoil	0 to 1-1/2'	4	
2	COASTAL PLAINS: Very Loose Grey Silty SAND. (SM)			
3	Possible Fill Material			
4	Firm Tan/Grey Silty SAND. (SM)			
5	No Recovery	3-1/2" to 5'	11	MOIST
6		6' to 7-1/2'	4	
7				
9	Firm Grey/Tan/Orange Clayey SAND. (SC)	8-1/2' to 10'	17	GW @ T.O.B. WET
10				
11				
12				
13				
14	Firm Grey Poorly Graded SAND w/ shell fragments. (SP)	13-1/2' to 15'	20	
15	Flowing Sands			
16				
17				
18				
19	Firm Orange Poorly Graded SAND w/ shell fragments. (SP)	18-1/2' to 20'	16	
20	Flowing Sands			
21				
22				
23				
24				
25		23-1/2' to 25'	13	

Depth of Boring (ft): 35 Feet

Location of Boring: see Boring Location Plan

Depth of Groundwater T.O.B. (feet): 9-1/2 Feet

Method of Drilling: Hollow Stem Auger

Depth of Groundwater 24 hrs. (feet): Not Available

Performed By: Smith Drilling, Inc.

* The Blow Counts given above are recorded for a 140 pound hammer (falling 30 inches/blow) to drive a 2 inch O.D., 1.375 inch I.D. split-barrel sampler 12 inches, after an initial 6 inch seating increment.

SOIL TEST BORING LOG



Project Name: Existing Georgetown City Hall and Fire Station #1

Project Number: 16-20251-L

Date of Test: October 30, 2016

Boring Number: B-18 (continued)

Depth (feet)	Soil Description	Sample Interval	Blow Counts*	Remarks
26continued Firm Orange Poorly Graded SAND w/ shell fragments. (SP)	28-1/2' to 30'	50/4"	
27	Flowing Sands			
28				
29	Very Dense Dark Grey Silty SAND w/ limestone. (SM)			
30				
31				
32				
33				
34		33-1/2' to 35'	50/2"	
35				

Boring Refusal at 35 Feet.

Depth of Boring (ft): 35 Feet

Location of Boring: see Boring Location Plan

Depth of Groundwater T.O.B. (feet): 9-1/2 Feet

Method of Drilling: Hollow Stem Auger

Depth of Groundwater 24 hrs. (feet): Not Available

Performed By: Smith Drilling, Inc.

* The Blow Counts given above are recorded for a 140 pound hammer (falling 30 inches/blow) to drive a 2 inch O.D., 1.375 inch I.D. split-barrel sampler 12 inches, after an initial 6 inch seating increment.

SOIL TEST BORING LOG

Project Name: Existing Georgetown City Hall and Fire Station #1

Project Number: 16-20251-L

Date of Test: October 30, 2016



Boring Number: B-19

Depth (feet)	Soil Description	Sample Interval	Blow Counts*	Remarks
1	SURFACE MATERIALS: 2" Asphalt and 6" Base Course Material	0 to 1-1/2'	23	
2	COASTAL PLAINS: Very Firm Brown/Grey Silty SAND. (SM)			
3	Possible Fill Material			
4	Loose Brown/Grey Silty SAND. (SM)			
5	Very Loose to Loose Grey/Tan Silty SAND. (SM)	3-1/2" to 5'	8	MOIST
6		6' to 7-1/2'	4	MOIST GW @ T.O.B.
7				
8	Loose Orange/Grey Poorly Graded SAND w/ shell fragments. (SP) Flowing Sands	8-1/2' to 10'	8	WET
9				
10				
11				
12				
13	Firm Grey Silty SAND. (SM)	13-1/2' to 15'	6	
14				
15				
16				
17	Firm Grey/Orange Poorly Graded SAND w/ shell fragments. (SP)	18-1/2' to 20'	11	
18				
19				
20				
21				
22		23-1/2' to 25'	16	
23				
24				
25				

Depth of Boring (ft): 35 Feet

Location of Boring: see Boring Location Plan

Depth of Groundwater T.O.B. (feet): 8 Feet

Method of Drilling: Hollow Stem Auger

Depth of Groundwater 24 hrs. (feet): Not Available

Performed By: GS2 Drilling

* The Blow Counts given above are recorded for a 140 pound hammer (falling 30 inches/blow) to drive a 2 inch O.D., 1.375 inch I.D. split-barrel sampler 12 inches, after an initial 6 inch seating increment.

SOIL TEST BORING LOG



Project Name: Existing Georgetown City Hall and Fire Station #1

Project Number: 16-20251-L

Date of Test: October 30, 2016

Boring Number: B-19 (continued)

Depth (feet)	Soil Description	Sample Interval	Blow Counts*	Remarks
26continued Firm Grey/Orange Poorly Graded SAND w/ shell fragments. (SP)	28-1/2' to 30'	50/4"	
27				
28				
29				
30				
31				
32				
33				
34	Very Dense Dark Grey Silty SAND w/ limestone. (SM)	33-1/2' to 35'	50/4"	
35				

Boring Refusal at 35 Feet.

Depth of Boring (ft): 35 Feet

Location of Boring: see Boring Location Plan

Depth of Groundwater T.O.B. (feet): 8 Feet

Method of Drilling: Hollow Stem Auger

Depth of Groundwater 24 hrs. (feet): Not Available

Performed By: GS2 Drilling

* The Blow Counts given above are recorded for a 140 pound hammer (falling 30 inches/blow) to drive a 2 inch O.D., 1.375 inch I.D. split-barrel sampler 12 inches, after an initial 6 inch seating increment.

SOIL TEST BORING LOG

Project Name: Existing Georgetown City Hall and Fire Station #1

Project Number: 16-20251-L

Date of Test: October 30, 2016



Boring Number: B-20

Depth (feet)	Soil Description	Sample Interval	Blow Counts*	Remarks	
1	SURFACE MATERIALS: 2" Asphalt and 6" Base Course Material	0 to 1-1/2'	13		
2	COASTAL PLAINS: Firm Dark Grey Silty SAND. (SM)				
3	Possible Fill Material				
4	Very Loose Grey Silty SAND. (SM)				
5	Very Loose Orange/Tan/Grey Clayey SAND. (SC)	3-1/2" to 5'	4		
6					
7					
8	Very Loose Orange/Tan/Grey Clayey SAND. (SC)	6' to 7-1/2'	1	MOIST	
9		8-1/2' to 10'	4	GW @ T.O.B.	
10				WET	
11		Firm Grey Poorly Graded SAND w/ shell fragments. (SP)	13-1/2' to 15'	14	
12					
13					
14					
15	Loose Grey Silty SAND. (SM)	18-1/2' to 20'	8		
16					
17					
18					
19	Very Dense Grey Poorly Graded SAND w/ shell fragments. (SP)	23-1/2' to 25'	50/4"		
20					
21					
22					
23					
24					
25					

Depth of Boring (ft): 35 Feet

Location of Boring: see Boring Location Plan

Depth of Groundwater T.O.B. (feet): 9 Feet

Method of Drilling: Hollow Stem Auger

Depth of Groundwater 24 hrs. (feet): Not Available

Performed By: GS2 Drilling

* The Blow Counts given above are recorded for a 140 pound hammer (falling 30 inches/blow) to drive a 2 inch O.D., 1.375 inch I.D. split-barrel sampler 12 inches, after an initial 6 inch seating increment.

SOIL TEST BORING LOG



Project Name: Existing Georgetown City Hall and Fire Station #1

Project Number: 16-20251-L

Date of Test: October 30, 2016

Boring Number: B-20 (continued)

Depth (feet)	Soil Description	Sample Interval	Blow Counts*	Remarks
26continued Very Dense Grey Poorly Graded SAND w/ shell fragments. (SP)	28-1/2' to 30'	50/5"	
27				
28				
29				
30				
31				
32				
33				
34	Very Dense Dark Grey Silty SAND w/ limestone. (SM)	33-1/2' to 35'	50/5"	
35	Very Dense Grey Silty SAND w/ limestone. (SM)			
35	Very Dense Grey Silty SAND w/ limestone. (SM)			

Boring Refusal at 35 Feet.

Depth of Boring (ft): 35 Feet

Location of Boring: see Boring Location Plan

Depth of Groundwater T.O.B. (feet): 9 Feet

Method of Drilling: Hollow Stem Auger

Depth of Groundwater 24 hrs. (feet): Not Available

Performed By: GS2 Drilling

* The Blow Counts given above are recorded for a 140 pound hammer (falling 30 inches/blow) to drive a 2 inch O.D., 1.375 inch I.D. split-barrel sampler 12 inches, after an initial 6 inch seating increment.

SOIL TEST BORING LOG

Project Name: Existing Georgetown City Hall and Fire Station #1

Project Number: 16-20251-L

Date of Test: October 30, 2016



Boring Number: B-21

Depth (feet)	Soil Description	Sample Interval	Blow Counts*	Remarks
1	SURFACE MATERIALS: 2" Asphalt and 6" Base Course Material			
2	COASTAL PLAINS: Loose to Firm Brown/Grey Silty SAND. (SM) <i>Possible Fill Material</i>	0 to 1-1/2'	8	
3				
4				
5				
6				
7				Firm Grey/Orange Silty SAND. (SM)
8				
9				
10	Very Loose Orange/Grey Clayey SAND. (SC)	6' to 7-1/2'	12	MOIST
11				
12				
13				
14				
15	Very Loose Grey/Tan Silty SAND. (SM)	8-1/2' to 10'	4	WET
16				
17				
18				
19	Dense Grey/Tan Poorly Graded SAND w/ shell fragments. (SP) <i>Flowing Sands</i>	13-1/2' to 15'	2	
20				
21				
22				
23				
24				Loose Grey/Tan Poorly Graded SAND w/ shell fragments. (SP) <i>Flowing Sands</i>
25				
		23-1/2' to 25'	9	

Depth of Boring (ft): 35 Feet

Location of Boring: see Boring Location Plan

Depth of Groundwater T.O.B. (feet): 8-1/2 Feet

Method of Drilling: Hollow Stem Auger

Depth of Groundwater 24 hrs. (feet): Not Available

Performed By: GS2 Drilling

* The Blow Counts given above are recorded for a 140 pound hammer (falling 30 inches/blow) to drive a 2 inch O.D., 1.375 inch I.D. split-barrel sampler 12 inches, after an initial 6 inch seating increment.

SOIL TEST BORING LOG



Project Name: Existing Georgetown City Hall and Fire Station #1

Project Number: 16-20251-L

Date of Test: October 30, 2016

Boring Number: B-21 (continued)

Depth (feet)	Soil Description	Sample Interval	Blow Counts*	Remarks
26continued Loose Grey/Tan Poorly Graded SAND w/ shell fragments. (SP)	28-1/2' to 30'	50/3"	
27	Flowing Sands			
28				
29	Very Dense Dark Grey Silty SAND w/ limestone. (SM)			
30				
31				
32				
33				
34		33-1/2' to 35'	50/4"	
35				

Boring Refusal at 35 Feet.

Depth of Boring (ft): 35 Feet

Location of Boring: see Boring Location Plan

Depth of Groundwater T.O.B. (feet): 8-1/2 Feet

Method of Drilling: Hollow Stem Auger

Depth of Groundwater 24 hrs. (feet): Not Available

Performed By: GS2 Drilling

* The Blow Counts given above are recorded for a 140 pound hammer (falling 30 inches/blow) to drive a 2 inch O.D., 1.375 inch I.D. split-barrel sampler 12 inches, after an initial 6 inch seating increment.

SOIL TEST BORING LOG

Project Name: Existing Georgetown City Hall and Fire Station #1

Project Number: 16-20251-L

Date of Test: October 31, 2016



Boring Number: B-22

Depth (feet)	Soil Description	Sample Interval	Blow Counts*	Remarks
1	SURFACE MATERIALS: 3" Topsoil			
2	COASTAL PLAINS: Loose to Very Loose Tan/Grey Silty SAND. (SM) <i>Possible Fill Material</i>	0 to 1-1/2'	5	
3				
4				
5				
6				
7				Very Loose Orange/Grey Clayey SAND. (SC)
8				
9				
10				
11				
12				
13	Very Firm Grey/Tan Silty SAND. (SM)	6' to 7-1/2'	4	MOIST
14				
15				
16				
17				
18				
19	Firm Orange Poorly Graded SAND. (SP) <i>Flowing Sands</i>	8-1/2' to 10'	6	WET
20				
21				
22				
23				
24				Very Firm Orange/Grey Poorly Graded SAND w/ shell fragments. (SP) <i>Flowing Sands</i>
25				
		18-1/2' to 20'	15	
		23-1/2' to 25'	23	

Depth of Boring (ft): 30 Feet

Location of Boring: see Boring Location Plan

Depth of Groundwater T.O.B. (feet): 8-1/2 Feet

Method of Drilling: Hollow Stem Auger

Depth of Groundwater 24 hrs. (feet): Not Available

Performed By: Smith Drilling, Inc.

* The Blow Counts given above are recorded for a 140 pound hammer (falling 30 inches/blow) to drive a 2 inch O.D., 1.375 inch I.D. split-barrel sampler 12 inches, after an initial 6 inch seating increment.

SOIL TEST BORING LOG



Project Name: Existing Georgetown City Hall and Fire Station #1

Project Number: 16-20251-L

Date of Test: October 31, 2016

Boring Number: B-22 (continued)

Depth (feet)	Soil Description	Sample Interval	Blow Counts*	Remarks
26continued Very Firm Orange/Grey Poorly Graded SAND w/ shell fragments. (SP)			
27	Flowing Sands			
28				
29	Very Dense Dark Grey Silty SAND w/ limestone. (SM)			
30				

Boring Refusal at 30 Feet.

Depth of Boring (ft): 30 Feet

Location of Boring: see Boring Location Plan

Depth of Groundwater T.O.B. (feet): 8-1/2 Feet

Method of Drilling: Hollow Stem Auger

Depth of Groundwater 24 hrs. (feet): Not Available

Performed By: Smith Drilling, Inc.

* The Blow Counts given above are recorded for a 140 pound hammer (falling 30 inches/blow) to drive a 2 inch O.D., 1.375 inch I.D. split-barrel sampler 12 inches, after an initial 6 inch seating increment.

SOIL TEST BORING LOG



Project Name: Existing Georgetown City Hall and Fire Station #1

Project Number: 16-20251-L

Date of Test: October 31, 2016

Boring Number: B-23

Depth (feet)	Soil Description	Sample Interval	Blow Counts*	Remarks
1	SURFACE MATERIALS: 3" Topsoil	0 to 1-1/2'	4	
2	COASTAL PLAINS: Very Loose Brown Silty SAND. (SM)			
3	Possible Fill Material			
4	Loose Tan Grey Silty SAND w/ possible petrol contamination. (SM)			
5		3-1/2" to 5'	8	

Boring Abandoned at 5 Feet.

Depth of Boring (ft): 5 Feet

Location of Boring: see Boring Location Plan

Depth of Groundwater T.O.B. (feet): Not Encountered

Method of Drilling: Hollow Stem Auger

Depth of Groundwater 24 hrs. (feet): Not Available

Performed By: GS2 Drilling

* The Blow Counts given above are recorded for a 140 pound hammer (falling 30 inches/blow) to drive a 2 inch O.D., 1.375 inch I.D. split-barrel sampler 12 inches, after an initial 6 inch seating increment.

SOIL TEST BORING LOG



Project Name: Existing Georgetown City Hall and Fire Station #1

Project Number: 16-20251-L

Date of Test: October 31, 2016

Boring Number: B-24

Depth (feet)	Soil Description	Sample Interval	Blow Counts*	Remarks
1	SURFACE MATERIALS: 3" Asphalt and 8" Base Course Material	0 to 1-1/2'	6	
2	COASTAL PLAINS: Loose Brown/Tan Silty SAND. (SM) <i>Possible Fill Material</i>			
3				
4	Firm Brown/Tan Silty SAND w/ possible petrol contamination. (SM)			
5		3-1/2" to 5'	12	

Boring Abandoned at 5 Feet.

Depth of Boring (ft): 5 Feet

Location of Boring: see Boring Location Plan

Depth of Groundwater T.O.B. (feet): Not Encountered

Method of Drilling: Hollow Stem Auger

Depth of Groundwater 24 hrs. (feet): Not Available

Performed By: GS2 Drilling

* The Blow Counts given above are recorded for a 140 pound hammer (falling 30 inches/blow) to drive a 2 inch O.D., 1.375 inch I.D. split-barrel sampler 12 inches, after an initial 6 inch seating increment.