VOLUNTARY REMEDIATION PROGRAM APPLICATION

Coastal Concrete Site
2337 Louisville Road
Savannah, Chatham County, Georgia
Georgia EPD HSI No. 10867

January 26, 2018
Terracon Project No. ES127009

Prepared for:

Royal Transportation Services, Inc.
Miami, Florida

Prepared by:

Terracon Consultants, Inc.
Savannah, Georgia

January 26, 2018

Georgia Environmental Protection Division
Response and Remediation Program
Land Protection Branch
2 Martin Luther King, Jr. Drive, SE
Suite 1054, East Tower
Atlanta, Georgia 30334

Attn: Mr. David Brownlee

Re: Voluntary Remediation Program Application
Coastal Concrete Site
2337 Louisville Road
Savannah, Chatham County, Georgia
Georgia EPD HSI No. 10867
Terracon Project No. ES127009

Dear Mr. Brownlee:

On behalf of Royal Transportation Services, Inc., Terracon Consultants, Inc. (Terracon) is submitting this Voluntary Remediation Program (VRP) Application for the above-referenced facility. This VRP Application has been completed in general accordance with the Georgia Voluntary Remediation Program Act (O.C.G.A. § 12-8-100). The VRP Application fee is attached.

If you have any questions concerning this report, please contact us at (912) 629 4000.

Sincerely,
Terracon Consultants, Inc.

R. Luke Bragg, PE
Project Engineer

William S. Anderson, III, PE
Senior Principal / Office Manager

Enclosures
cc: 1 – Georgia EPD (1 hard copy; 2 electronic copies)
1 – Client (1 hard copy; 1 electronic copy)
1 – File (1 electronic copy)

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1.0 INTRODUCTION

Terracon Consultants, Inc. (Terracon) has prepared this Voluntary Remediation Program (VRP) Application on behalf of Pro Transport, Inc. for the Coastal Concrete, Inc. facility located at 2337 Louisville Road in Savannah, Chatham County, Georgia (Property). The facility is currently listed on the Georgia Environmental Protection Division (EPD) Hazardous Site Inventory (HSI) as site number 10867.

This VRP Application has been completed in general accordance with the Georgia Voluntary Remediation Program Act (O.C.G.A. § 12-8-100). The VRP Application and Checklist are provided in Appendix A. The tax map and warranty deed documentation for the property are included in Appendix B. A Site Location Map (Figure 1), Site Vicinity Map (Figure 2), and Site Diagram (Figure 3) are included in Appendix C.

1.1 Purpose

The purpose of this document is to provide justification for enrollment of the property into the VRP by presenting a current understanding of site conditions based on existing data and a preliminary conceptual site model (CSM), a plan for additional investigation to fill data gaps, and a plan for site remediation.

1.2 Property Eligibility

Under O.C.G.A § 12-8-105, the following criteria must be met in order to be considered a qualifying property for the VRP:

1. The property must be listed on the inventory under Part 2 of this article or be a property which meets the criteria of O.C.G.A. § 12-8-105 or otherwise have a release of regulated substances into the environment;
2. The property shall not:

a. Be listed on the federal National Priorities List pursuant to the federal Comprehensive Environmental Response, Compensation, and Liability Act, 42 U.S.C. § 9601, et seq;

b. Be currently undergoing response activities required by an order of the regional administrator of the federal Environmental Protection Agency; or

c. Be a facility required to have a permit under O.C.G.A. § 12-8-66

3. Qualifying the property under this part would not violate the terms and conditions under which the division operates and administers remedial programs by delegation or similar authorization from the United States Environmental Protection Agency; and

4. Any lien filed under subsection (e) of O.C.G.A. § 12-8-96 or subsection (b) of O.C.G.A. § 12-13-12 against the property shall be satisfied or settled and released by the director pursuant to O.C.G.A. § 12-8-94 or O.C.G.A. § 12-13-6.

Based on the criteria listed above, the Coastal Concrete, Inc. site is a “qualifying property” under the VRP.

1.3 Participant Eligibility

Under O.C.G.A. § 12-8-106, the following criteria must be met in order for the participant to meet the qualifications of the VRP:

1. Be the property owner of the voluntary remediation property or have express permission to enter another’s property to perform corrective action including, to the extent practical, implementing controls for the site pursuant to written lease, order, or indenture;

2. Not be in violation of any order, judgment, statute, rule, or regulation subject to the enforcement authority of the director; and

3. Meet other such criteria as may be established by the board pursuant to O.C.G.A. § 12-8-103.

The site is currently owned by Royal Transportation Services, Inc. of Miami, Florida. The property is currently leased by Pro Transport Savannah, Inc. The participant, Royal Transportation Services, Inc., meets all of the criteria stated above, and is therefore “qualified” under the VRP. The contact for the applicant and owner of the site is as follows:

Mr. Oscar Acharandio
Royal Transportation Services, Inc.
10800 NW South River Drive
Miami, Miami-Dade County, Florida
(305) 884 4186
oscar@protransportusa.com

2.0 BACKGROUND

2.1 Site Description

The site is a single parcel (Parcel No. 2-0599-01-010) consisting of 4.923 acres of land located at 2337 Louisville Road in the City of Savannah, Chatham County, Georgia. The site location is depicted on Figure 1 in Appendix C.

The site is improved with a 2,480 square foot (sq. ft.) service garage, a 420 sq. ft. equipment shed, concrete paved areas, and a perimeter chain-link fence. The site is leased by Pro Transport Savannah, Inc., which is an intermodal trucking company that transports containers mainly to and from the Port of Savannah. The site operates exclusively as a trucking terminal. The only truck maintenance performed on-site is to occasionally change tires and the rare replacement of brake fluid. All other truck maintenance and repair (including oil changes) are performed off-site. A diagram of the site is shown on Figure 3 in Appendix C.

2.2 Site History

According to the Release Notification package submitted in February 2007, the subject property was used as a truck service/garage facility as early as 1959 into the mid-1990s. The northeast portion of the property formerly contained a meatpacking facility while the eastern portion of the property contained storage buildings and holding pens associated with the former meatpacking facility. A rail spur associated with the former meatpacking facility was formerly located along the southern and eastern boundaries of the site.

Owners of the property as noted by the 2017 Chatham County Board of Assessors Property Record Card are listed below:

- Meddin Enterprises, Inc. — Unknown-1977
- Lawrence C. Lee — 1977-1999
- Savannah Concrete, Inc. — 1999-2001
- Turner Enterprises of Savannah — 2001-2005
- Coastal Concrete, Inc. — 2005-2007
- Coastal Concrete Southeast, LLC — 2007-2008
- Coastal Concrete, Inc. — 2008-2012
- Royal Transport Services, Inc. — 2012-Present

As noted above, the prior owner of the site, Coastal Concrete, Inc. acquired the property in 2005. From 2005 through 2012, the property was operated as a ready-mix concrete plant.

2.3 Summary of Previous Investigations and Regulatory Status

A Phase II Environmental Site Assessment was conducted at the site in January 2007. Seven soil samples ranging from 0-6 feet in depth exhibited detections of twenty different volatile or semi-volatile constituents. None of the constituents in soil were detected at concentrations above the Georgia EPD Hazardous Site Response Act (HSRA) Appendix I Notification Concentrations (NCs). Four shallow groundwater samples were also collected from the site. Only one of the groundwater samples (SAV-7, located down gradient of the former truck maintenance building) exhibited volatile organic compounds above the Appendix III NCs. The groundwater sample from SAV-7 contained trichloroethylene (210 µg/L), cis-1,2-dichloroethylene (190 µg/L), trans-1,2-dichloroethylene (8.9 µg/L), and vinyl chloride (32 µg/L). A Release Notification package was submitted to the Georgia EPD in February 2007. According to the release notification, the sources of the release were unknown; however, it was likely that former truck maintenance and repair activities conducted on- and off-site contributed to the release(s).

The Georgia EPD conducted a site visit and prepared a trip report in March 2007. The trip report concluded that the site was best described as having limited access and that the nearest occupied residence was located 1,000-3,000 feet from the site. The nearest active drinking water supply well was located within a ½-mile radius of the site. The Georgia EPD recommended that the site be re-evaluated based on the information obtained during site the visit.

The site was listed on the Georgia EPD HSI as site number 10867 in July 2007. The Georgia EPD scored the on-site exposure pathway at 11.11, which was below the threshold of 20. The Groundwater Pathway score was calculated at 40.65, which exceeded the threshold of 10. Compliance Status Report Call-In letters were submitted by the Georgia EPD in July 2010 and April 2017. As of the date of this application, a compliance status report has not been submitted.

3.0 CURRENT SITE CONDITIONS

The most current site conditions were identified in a Limited Phase II Site Investigation (LSI) completed by Terracon at the site in March 2012. Terracon's LSI included one (1) cone penetrometer test (CPT) to assist with the characterization of subsurface geology and the installation of five (5) groundwater monitoring wells in the vicinity of previous sample location SAV-7 to determine the extent of the contaminant plume. A summary of the findings of the LSI are included in the sections below. The 2012 LSI report is also included in Appendix D.

3.1 Hydrogeology

During site activities, the saturated zone was encountered at a depth of approximately 13 feet below grade. Groundwater levels measured 24 hours after monitoring well installation indicated a potentiometric surface of 3.5-5.5 feet below tops of casing. The borings primarily consisted of sands to silty sands, underlain by sandy clays and clayey sands to a depth of 15 feet below grade. A confining clay layer was identified at a depth of 15 feet below grade.

3.2 Soil Analytical Results

Soil samples were collected from each of the soil borings (denoted as MW-1 through MW-5) and submitted to the laboratory to be analyzed for trichloroethylene (TCE), cis-1,2-dichloroethylene (cis-1,2-DCE), trans-1,2-dichloroethylene (trans-1,2-DCE, and vinyl chloride via EPA Method 8260. A summary of the soil laboratory analytical results is included on the table below.

Table 3.2 – Soil Analytical Results

Sample ID	Sample Depth (feet below grade)	TCE (mg/kg)	cis-1,2-DCE (mg/kg)	trans-1,2-DCE (mg/kg)	Vinyl chloride (mg/kg)
MW-1 #4	12-13	BRL	**0.902**	BRL	BRL
MW-2 #4	11-12	BRL	BRL	BRL	BRL
MW-3 #4	7-8	0.0084	0.0176	BRL	0.0056
MW-4 #5	12-13	BRL	**0.664**	BRL	BRL
MW-5 #5	15	**0.139**	0.134	BRL	0.0314
HSRA Appendix I NC		0.13	0.53	0.53	0.04

Soil samples collected on March 1, 2012.
BRL = Concentration is below the laboratory method reporting limit.
Bold = Concentration exceeds the applicable HSRA Appendix I NC.

3.3 Groundwater Analytical Results

Groundwater samples were collected from each of the groundwater monitoring wells installed as part of the 2012 LSI (MW-1 through MW-5). The groundwater samples were submitted to the laboratory to be analyzed for TCE, cis-1,2-DCE, trans-1,2-DCE, and vinyl chloride via EPA

Method 8260. A summary of the groundwater laboratory analytical results is included on the table below. The analytical results from well SAV-7 installed as part of site investigation work completed in 2007 have also been included on the table.

Table 3.3 – Groundwater Analytical Results

Well ID	Screened Interval (feet below grade)	TCE (µg/L)	cis-1,2-DCE (µg/L)	trans-1,2-DCE (µg/L)	Vinyl chloride (µg/L)
MW-1	4.5-14.5	**210**	**919**	BRL	**121**
MW-2	4.5-14.5	4.39	4.43	BRL	BRL
MW-3	4.5-14.5	**214**	**873**	BRL	**176**
MW-4	4.5-14.5	**438**	**1,700**	BRL	**312**
MW-5	4.5-14.5	**162**	**474**	BRL	**66.2**
SAV-7	5-15	**210**	**190**	8.9	**32**
HSRA Appendix III NC		5	70	100	2

Groundwater samples from MW-1 through MW-5 were collected on March 2, 2012. The groundwater sample from SAV-7 was collected on January 17, 2007.
BRL = Concentration is below the laboratory method reporting limit.
Bold = Concentration exceeds the applicable HSRA Appendix III NC.

4.0 PRELIMINARY CONCEPTUAL SITE MODEL

A preliminary CSM has been developed using data collected during previous site investigations and information obtained from reviews of published literature. It is intended that the CSM will be updated as new information is gathered for the site. The CSM illustrates the site's surface and subsurface setting; potential human health and ecological receptors; and the complete and incomplete exposure pathways that exist for the site.

4.1 Geologic Setting

The following subsections summarize the regional and site-specific geomorphic, stratigraphic, and hydrogeologic settings. Geologic data for this area are based on numerous published reports, previous environmental studies conducted at the site, and discussions with other researchers familiar with the geology and hydrogeology of the area.

4.1.1 Regional Geology

The site is located in the Coastal Plain physiographic province of Georgia. The stratigraphy of the Coastal Plain of Georgia and Chatham County has been described by numerous authors (e.g., Herrick, 1961; Herrick and Vorhis, 1963; Counts and Donsky, 1963; Furlow, 1969; Chowns and Williams, 1983; Clarke et al., 1990; Weems and Edwards, 2001; Williams and Gill, 2010; and Clarke et al., 2011) and is summarized in the following paragraphs. The area stratigraphic units

are discussed in ascending order, from the deepest Paleocene units to the surficial Holocene deposits. Cretaceous and pre-Cretaceous rock units are typically found at depths of several thousand feet below ground surface in the area; therefore, only a general description of the lithologic character is included in this report.

Cretaceous and pre-Cretaceous Stratigraphy

Pre-Cretaceous strata underlying the area are considered "basement" rocks. These "basement" rocks consist of igneous intrusive rocks and low-grade metamorphic rocks of Paleozoic age, and sedimentary rocks and volcanic rocks of Triassic to Early Jurassic Age (Chowns and Williams, 1983). Upper Cretaceous sediments consist of inter-bedded sands and clayey silts at depths of 1,600 feet below ground surface (Herrick, 1961).

Paleocene Stratigraphy

Paleocene units in the area mark the beginning of a regional transgression of the sea that lasted through the late Eocene (Clarke et al., 1990). Paleocene units unconformably overlie strata of Late Cretaceous age. The Clayton Formation and the Cedar Keys Formation make up the Paleocene units in the area. The upper portion of the Clayton Formation is a hard, sandy glauconitic, fossiliferous limestone, while the remaining portion of the formation consists of glauconitic sand, argillaceous sand, and small amounts of medium-to-dark gray clay (Clarke et al., 1990). The Cedar Keys Formation is a Paleocene carbonate-evaporite facies. The Cedar Keys Formation consists of thick beds of anhydrite and dolomite (Clarke et al., 1990).

Eocene Stratigraphy

The early Eocene Oldsmar Formation unconformably overlies the Paleocene Clayton Formation (Clarke et al., 1990). Glauconitic limestone and dolomite are characteristic lithologies of the Oldsmar Formation (Miller, 1986; Clarke et al., 1990). The Oldsmar Formation may also contain an upper layer of sand in some areas (Clarke et al., 1990).

The middle Eocene Avon Park Formation unconformably overlies the Oldsmar formation (Miller, 1986; Clarke et al., 1990). The Avon Park, a glauconitic dolomite and limestone, has a thickness in the range of 700 to 500 feet in the Chatham County area.

The Ocala Limestone is a massive, fossiliferous limestone. Fossils identified in the Ocala include bryozoan remains, foraminiferal tests, and mollusk shells (Furlow, 1969; Miller, 1986; Clarke et al., 1990). The Ocala Limestone unconformably overlies the dolomite and limestone of the Avon Park Formation (Furlow, 1989; Krause and Randolph, 1989; and Clarke et al., 1990). The thickness of the Ocala is more than 200 feet thick, and in some areas exceeds 400 feet (Clarke et al., 1990).

Oligocene Stratigraphy

Buff-colored, porous fossiliferous (foraminiferal tests, micrite, and non-particulate ubiquitous phosphate) limestone describe the sediments of Oligocene age (Clarke et al., 1990). Huddleston

(1988) named these sediments the Lazaretto Creek Formation and the Tiger Leap Formation. Weems and Edwards (2001) refined the descriptions of the two formations. The Lazaretto Creek Formation includes the lower Oligocene sediments in the study area and the Tiger Leap Formation includes the upper Oligocene sediments marked by an increase in phosphate. The abundance of miliolid foraminifera in the Oligocene sediments is used to differentiate the unit from the underlying Ocala Limestone, and the absence of particulate phosphate is used to differentiate the overlying Miocene carbonate sediments.

Miocene Stratigraphy

There are three units of Miocene age in Chatham County. These units have been described lithologically and by geophysical markers by several authors (Furlow, 1969; Huddleston, 1988; Clarke et al., 1990; Weems and Lewis, 2001). The three (3) layers are lithologically similar and are only differentiated based on stratigraphic position, geophysical characteristics, and limited paleontologic evidence (Clarke et al., 1990).

The lowermost Miocene unit in the Chatham County area was designated as Unit C by Clarke and others (1990). Unit C is correlative to the Parachucla Formation of Huddleston (1988) and the Tampa Limestone equivalent of Furlow (1969). Typically, only the lower portion of Unit C is found in the area, which is generally a sandy, phosphatic dolomite or limestone (Clarke et al., 1990). The middle clay and upper sandy layers have been removed by erosion (Clarke et al., 1990).

The middle Miocene unit has been designated as Miocene Unit B (Miller, 1986, and Clarke et al., 1990). Unit B is correlative to the Hawthorn Formation of Counts and Donsky (1963) and Miller (1986); the Marks Head Formation of Woolsey (1977) and Huddlestun (1988). The Marks Head Formation name has been used for this study after the work of Weems and Edwards (2001). The basal carbonate layer on Unit B typically consists of olive-green dolomite and limestone that contains very fine to coarse quartz sand, shiny brown to black phosphatic sand, and contains some fossils, typically mollusk molds and shark teeth. (Furlow, 1969; Clarke et al., 1990). Distinguishing the basal layer of Unit B from Unit C is difficult because both Unit C and Unit B are lithologically similar, therefore requiring paleontological evidence and/or borehole geophysical logs (Clarke et al., 1990). The two (2) basal units are juxtaposed because the middle and upper clastic layers of Unit C have been eroded away (Clarke et al., 1990). The middle layer of Unit B typically consists of olive-green phosphatic silty clay and clayey silt and grades upward to the upper sandy layer (Furlow, 1969; and Clarke et al., 1990). The upper sandy unit of Unit B typically consists of poorly sorted, very fine to coarse sand and locally a thin very dense dolomite layer (Furlow, 1969; and Clarke et al., 1990). Unit B (Hawthorn Formation) ranges in thickness from 20 to 55 feet thick (Furlow, 1969).

Miocene Unit A overlies Unit B and is included in the Hawthorn Formation of Counts and Donsky (1963) and Miller (1986), and correlates with the Coosawhatchie Formation of Woolsey (1977) and Huddleston (1988). The name Coosawhatchie Formation is adopted for this study based on

the work of Weems and Edwards (2001). The Coosawhatchie Formation contains two (2) members. The basal layer, which is the Tybee Phosphorite Member, consists of a sandy phosphatic limestone and dolomite with some fossils (Clarke et al., 1990). In Chatham County, clay is the matrix material surrounding most of the phosphate grains instead of dolomite (Clarke et al., 1990). The sand in the basal unit generally consists of very fine to coarse quartz and brown to black phosphate. The middle clay layer consists of fossiliferous clay and silt laminae and the upper sand unit consists of a very fine to coarse, poorly sorted sand (Clarke et al., 1990). The upper portion of this unit is equivalent to the Berryville Clay Member. Unit A is about 20 feet thick in the Savannah Area.

Pliocene, Pleistocene, and Holocene Stratigraphy

Sediments of Pliocene age are generally accepted as absent in Chatham County, with Pleistocene sediments unconformably overlying Miocene sediments (Herrick, 1965; Furlow, 1969; and Clarke et al., 1990). Pleistocene sediments typically consist of arkosic sand and gravel with discontinuous clay beds. Basal Pleistocene sediments contain reworked olive-green clay from the underlying Miocene units (Furlow, 1969). Lignitic and fossiliferous clay and micaceous sandy sediment ranging in thickness from 10 to 60 feet are typical of Pleistocene sediments. The Penholoway Formation is the principal surficial Pleistocene deposit in Chatham County (Weems and Edwards, 2001). The Penholoway is one of many remnants of former shoreline complexes through the area, which were the result of numerous transgressions and regressions of the sea, the result of extensive glaciations in North American during the Pleistocene Epoch.

4.1.2 Regional Hydrogeology

Hydrologic units in Chatham County, Georgia include (in descending order), the surficial aquifer system, consisting of the water-table zone, upper confined zone; the Upper Floridan Aquifer; middle confining; the lower Floridan Aquifer; and the lower confining unit (Williams and Gill, 2010).

In the vicinity of the site, the surficial aquifer system is present from land surface to approximately 60 feet below land surface (bls) (Williams and Gill, 2010). For this study, the surficial aquifer is undifferentiated; however, the surficial aquifer is typically informally divided into a water-table zone, an upper confined zone, and a lower confined zone. The confining unit underlying the surficial aquifer system is identified on natural-gamma radiation logs by the A-marker horizon. The bottom of the confining unit is determined by the location of the C-marker horizon, which coincides with the top of the Upper Floridan Aquifer (Clarke et al., 1990).

The principal source for all drinking water uses in the coastal area of Georgia is the Floridan Aquifer system. The Floridan Aquifer system is composed of carbonate rocks of varying permeability (Clarke et al., 1990; Clark et al., 2011). There are several water-bearing zones within the Floridan Aquifer system that are separated by layers of relatively dense limestone and dolostone that act as semi-confining units (Krause and Randolph, 1989; Clarke et al., 1990; Williams and Gill, 2010).

The Chatham County area, the two shallowest water bearing zones of the five that comprise Floridan Aquifer system are part of the upper Floridan Aquifer (McCollum and Counts, 1964; Krause and Randolph, 1989; Clark et al., 1990; Williams and Gill, 2010). The upper Floridan Aquifer is overlain by a confining unit consisting of layers of silty clay and dense phosphatic Oligocene dolomite identified by a distinct response on gamma-ray logs (Clarke et al., 1990). Clarke and others (1990) identified the base of the confining unit as the C-marker horizon. The C-marker horizon is present near the top of the Suwannee Limestone and is considered to be the top of the upper Floridan Aquifer in the study area (Williams and Gill, 2010). Based on well log information for nearby Meddin Package Co. No. 2 Well (USGS Well ID 36Q038), the top of the upper Floridan Aquifer is encountered at a depth of 215 feet. The D-marker horizon represents the top of the permeable zone of the Upper Floridan Aquifer and is present at the top of the Ocala Limestone at a depth of 309 feet in the study area (Williams and Gill, 2010).

4.1.3 Site Geology

Based on geologic boring logs prepared during Terracon's 2012 LSI, the general lithology of the soil observed at the site consisted of sands to silty sands, underlain by sandy clays and clayey sands to a depth of 15 feet below grade. A confining clay layer was identified at a depth of 15 feet below grade.

Stratigraphic cross-sections will be developed following completion of a site survey and the installation of additional monitoring wells for the proposed VRP investigation. The stratigraphic cross-sections will be provided in the first semi-annual progress report.

4.1.4 Site Hydrogeology

During Terracon's 2012 LSI, the saturated zone was encountered at a depth of approximately 13 feet below grade. Groundwater levels measured 24 hours after monitoring well installation indicated a potentiometric surface of 3.5-5.5 feet below tops of casing. The locations and tops of casing for the monitoring wells have not been surveyed. As such, there is insufficient data is currently available to develop a potentiometric surface map and determine the shallow groundwater flow direction for the site. Site survey and groundwater elevation data collected during the proposed VRP investigation will be used to create a potentiometric surface map; determine the groundwater flow direction and hydraulic gradient; and calculate the groundwater flow velocity. In addition, slug tests will be performed for select wells to determine a representative hydraulic conductivity for the site. This hydrogeologic information will be provided in the first semi-annual progress report.

4.2 Contaminants of Concern

Until further investigation has been conducted, contaminants of concern include volatile and semi-volatile organic compounds that have been historically detected at concentrations above the laboratory method reporting limits. These contaminants are listed below along with the impacted media. Contaminants that have been detected in soil or groundwater at concentrations above the applicable HSRA Appendix I or III NCs are indicated in **bold** typeface:

Table 4.2 – Contaminants of Concern

Analyte	Media	
	Soil	Groundwater
1,1-dichloroethylene		X
Acenaphthene	X	
Acenaphthylene	X	
Anthracene	X	
Benzo(a)anthracene	X	
Benzo(a)pyrene	X	
Benzo(b)fluoranthene	X	
Benzo(g,h,i)perylene	X	
Benzo(k)fluoranthene	X	
Chrysene	X	
Cis-1,2-Dichloroethylene	**X**	**X**
Cumene	X	
Dibenzo(a,h)anthracene	X	
Fluoranthene	X	
Fluroene	X	
Indeno(1,2,3-cd)pyrene	X	
Naphthalene	X	X
Phenanthrene	X	
Pyrene	X	
Trans-1,2-Dichloroethylene		X
Trichloroethylene	**X**	**X**
Vinyl Chloride	X	**X**

4.3 Potential Environmental Receptors

4.3.1 Human Receptors

The site is zoned heavy industrial and developed with a truck terminal facility and parking lot. Prior to its current use, the site was developed as a ready-mix concrete plant, a meatpacking facility, and a truck service/garage facility. Based on the use of the site, on-site residents are not considered potential human receptors.

The facility is enclosed by a chain link fence capped with three strands of barbed wire. The fence gate is open during business hours and is closed and secured when the facility is unoccupied. Based on the current restricted access, trespassers are not considered potential human receptors.

The adjoining properties to the east and west are zoned as heavy industrial and consist of a game bird and poultry equipment manufacturer, a drive line and hydraulics repair facility, a film studio, and office space. The site is bound to the north by Louisville Road, followed by the Central of Georgia Railroad. The site is bound to the south by undeveloped, wooded land and the Seaboard Coastline Railroad. The nearest residential structures are located approximately 1,000 feet northeast of the site. Based on the surrounding land use and distance from residential structures, off-site residents are not considered potential human receptors.

Based on the current use of the site and adjoining properties, the potential exposure pathways were evaluated for the following potential human receptors:

- Current and future on-site industrial/construction workers
- Current and future off-site industrial/construction workers

4.3.2 Ecological Receptors

The site is developed as a truck terminal and associated parking lot and does not provide a suitable habitat for plants or animals. In addition, the site has been historically developed as a ready-mix concrete plant, a meatpacking facility, and a truck service/garage facility. In the absence of natural habitats, vegetation, and surface water, as well as the significant amount of anthropogenic disturbance, biologically significant populations of wildlife receptors are not likely to be present at the site.

Wooded and potential wetland areas to the south of the site may provide suitable ecological habitat. Potential exposure to off-site ecological receptors will be revaluated based on the data collected during the proposed VRP investigation.

4.4 Potential Exposure Pathways

An evaluation of potential exposure pathways was conducted for the site. The exposure pathways evaluated include drinking water, soil, groundwater, vapor intrusion, and sediment and/or surface water from impacted soil and groundwater.

4.4.1 Drinking Water

The site and surrounding properties receive drinking water from the Main System of the City of Savannah Water Supply and Treatment Department. According to the City of Savannah's 2016 Water Quality Report (most recently published report available), the drinking water for the Main System is drawn from twenty-two (22) wells installed within the Floridan Aquifer at depths between 414 and 1,006 feet deep.

The 2007 Release Notification package indicates that a production well is present on-site. The well was reportedly for process use and to supply water to bathrooms within the former batch house and office building. Capacity and depth of the well were not provided in the Release Notification package. Construction details and current use of the water well are currently unknown. As such, the drinking water pathway is potentially complete for VOCs and SVOCs in shallow groundwater at the site. The approximate location of this well is indicated on Figure 4 (Well ID 1).

The 2007 Release Notification package also references the presence of water well on the adjacent eastern property. The well was reportedly used for industrial processes; however, the facility (former Meddin Packing Company) was no longer in operation at the time of the Release Notification package. The USGS National Water Information System (NWIS) database indicates the presence of a water well along the eastern property line of the subject site. The well is identified as 36Q038 and was installed to a total depth of 533 feet below grade. The well reportedly cased to withdraw from the Floridan Aquifer system. Well construction details, current use, and the groundwater flow direction are unknown. As such, the drinking water pathway is potentially complete for this off-site well. The approximate location of this well is indicated on Figure 4 (Well ID 2).

Three (3) additional wells were identified within a one-mile radius of the site using the USGS NWIS. Total depths of these wells range from 320 feet to 702 feet below ground surface. It is likely that these wells are cased to withdraw from the Floridan Aquifer system. Based on the distance from the site, it appears that the drinking water pathway is incomplete for these off-site wells.

4.4.2 Soil Ingestion, Inhalation, or Direct Contact

VOC and SVOC impacts have been identified in on-site soil. Detected concentrations of TCE and cis-1,2-DCE have exceeded the HSRA Appendix I NCs. As such, the soil exposure pathway ingestion, inhalation, or direct contact by on-site and off-site construction workers during future excavation activities is potentially complete. The proposed VRP investigation will include additional soil sampling to determine whether soil impacts are present within surface soils or in subsurface soils only. The data collected by the proposed VRP investigation will be used to further evaluate the potential soil exposure pathway.

4.4.3 Groundwater Ingestion, Inhalation, or Direct Contact

The groundwater exposure pathway for ingestion, inhalation, or direct contact by on-site and off-site construction workers during future excavation activities is potentially complete. VOCs and SVOCs have been detected at concentrations above the laboratory reporting limits. In addition, the concentrations of TCE, cis-1,2-DCE, and vinyl chloride were found to have exceeded the HSRA Appendix III NCs. The horizontal extent of the contaminant plume has not yet been defined and it is possible that groundwater impacts extend off-site. The proposed VRP investigation will include the installation of additional monitoring wells to delineate VOC/SVOC impacts. The data collected by the proposed VRP investigation will be used to further evaluate the potential groundwater exposure pathway.

4.4.4 Vapor Intrusion

VOC and SVOC impacts have been identified in site soil and groundwater in the vicinity of the two on-site structures. As such, the vapor intrusion pathway is potentially complete. The proposed VRP investigation will include the collection of additional soil and groundwater samples to determine the extent of volatile and semi-volatile impacts at the site. Soil gas and/or indoor air quality samples will be collected in order to further evaluate the vapor intrusion pathway.

4.4.5 Surface Water / Sediment

No surface water bodies are present at the site. On-site surface water consists of overland flow during precipitation events. No storm drains or ditches were noted on site. Based on the absence of surface water bodies and drainage features, surface water and sediment are not considered complete exposure pathways at this time.

4.5 Fate and Transport Modeling

Following the identification and horizontal delineation of the COCs in the soil and groundwater, fate and transport modeling will be conducted, if required.

4.6 Cleanup Standards

Soil and groundwater contamination will be subject to Type 5 Risk Reduction Standards (RRS). The Type 5 RRS allows contamination to remain in place, provided the principal exposure pathways at the site are mitigated by engineering and institutional controls. These controls could include, but are not limited to, a uniform environmental covenant governing site activity and use limitations (AULs), restricted access, and 24-hour security measures.

5.0 VRP INVESTIGATION PLAN

5.1 Soil Investigation

The soil investigation will include the completion of six (6) soil borings to delineate the extent of impacts in the vicinity of MW-1 through MW-5 and SAV-7. The proposed boring locations are depicted on Figure 5 in Appendix C.

Each soil boring will be initially advanced with a stainless steel hand auger to a depth of 5 feet below grade in order to verify underground utility clearance. Once cleared, the borings will be advanced using direct push methods to 15 feet below grade or the underlying confining clay layer identified in Terracon's 2012 LSI. Soil samples will be continuously collected to total boring depth to screen for organic vapors with a PID as well as document soil lithology and saturated zone depths. Terracon will use this information to prepare stratigraphic cross-sections of the area of concern and further develop the CSM.

One (1) surface soil sample (≤ 2 feet below grade) and one (1) subsurface soil sample will be collected from each boring for laboratory analysis. The subsurface soil sample will be collected from the interval exhibiting the highest PID reading. If no elevated PID reading is observed within the boring; the sample will be collected from the interval of most likely environmental impact above the saturated zone as determined in the field by the sampling professional.

The soil samples selected for analysis will be placed in laboratory prepared containers, labeled, and placed on ice in a cooler which will be secured with a custody seal. The samples and completed chain-of-custody forms will be transported to an independent Georgia-certified laboratory for analysis of the following parameters:

- VOCs by USEPA Method 8260
- Semi-Volatile Organic Compounds (SVOCs) by USEPA Method 8270

The soil analytical data will be evaluated to confirm the COCs for the site. If soil COCs are identified, Terracon will continue investigation activities as practical until COCs are delineated to Type 1 RRS (i.e. HSRA Appendix I NCs).

5.2 Groundwater Investigation

5.2.1 Groundwater Sampling

Following the completion of soil sampling activities, the six (6) soil borings will be converted to permanent monitoring wells. The wells will be completed in general accordance with procedures described in the US EPA Region 4, Science and Ecosystem Support Division guidance document titled Design and Installation of Monitoring Wells (SESDGUID-101-R1, effective date January 29, 2013). The proposed monitoring well locations are depicted on Figure 5 in Appendix C.

Hollow stem auger drilling methods will be used to install the wells. The monitoring wells will be constructed with 2-inch diameter, Schedule 40 PVC risers and 0.010-inch slotted screens. Sand pack will be installed around the well screen from the bottom of the boring to approximately one (1) to two (2) feet above the top of the screen. Hydrated bentonite pellets will be placed above the sand pack to approximately six (6) inches below the ground surface. The wells will be completed at the surface with concrete pads and metal covers.

Upon the completion of installation activities, the monitoring wells will be developed by surging and removing groundwater with a whale pump (or equivalent) until fluids appear relatively free of sediment. Following the completion of development activities, the monitoring wells will be purged and sampled in general accordance with the low-flow sampling protocol EPA Region 4, SESD Groundwater Sampling Operating Procedure (SESDPROC-301-R3), March 2013.

Following the stabilization of field parameters, groundwater samples will be collected and placed in laboratory prepared containers, labeled, and placed on ice in coolers secured with custody seals. The groundwater samples and completed chain-of-custody forms will be transported to an independent Georgia-certified laboratory and analyzed for the following parameters:

- VOCs by USEPA Method 8260
- SVOCs by USEPA Method 8270

Terracon will also sample existing groundwater monitoring wells MW-1 through MW-5 for VOCs and SVOCs in general accordance with low-flow sampling protocols. In the event these monitoring wells have been destroyed or otherwise impacted, Terracon will reinstall the wells in the immediate vicinity of the original locations.

Monitoring well locations and tops of casing will be survey following sampling activities. Groundwater elevation data collected during the investigation will be used to create a potentiometric surface map; determine the groundwater flow direction and hydraulic gradient; and calculate the groundwater flow velocity. This information will be presented in the first semi-annual progress report.

The groundwater analytical data will be compared to Type 1 RRS (i.e. HSRA Appendix III NCs) to determine the regulated COCs for the site. Terracon will continue groundwater investigation activities as practical until regulated COCs are delineated to Type 1 RRS. The analytical data will also be used to determine the appropriate location of a Type III double-cased, deep zone monitoring well. A deep zone monitoring well will be required to determine the vertical extent of groundwater impacts within the underlying clay formation present within the surficial aquifer.

5.2.2 Hydraulic Conductivity

Hydraulic conductivity, or the coefficient of permeability, describes the ease with which a fluid moves through the pore spaces or fractures in the subsurface. Terracon will determine a representative site hydraulic conductivity pursuant to the further development of the conceptual site model.

A representative hydraulic conductivity value will be determined by conducting rising head slug tests within various monitoring wells throughout the site. Rising head slug tests are conducted by quickly removing a known volume of water (the slug) from a monitoring well and measuring the rate at which groundwater returns to static conditions. In order to collect accurate data, a transducer with an on-board data logger will be used to collect depth to water and hydrostatic pressure data over time.

Upon completion of the slug tests, time and depth to water data will be imported into the AQTESOLV™ aquifer software for analysis. Additional information input to the software will include the monitoring well diameter, the borehole diameter, the total depth of the monitoring well, the static water column height, the initial displacement, and an assumed gravel pack porosity. It is presumed that the Bouwer and Rice method for determining the hydraulic conductivity in an unconfined aquifer will be used.

6.0 REMEDIATION PLAN

6.1 Groundwater Monitoring

Upon completion of horizontal and vertical delineation of regulated COCs in groundwater, a semi-annual groundwater monitoring program will be implemented for the site. Groundwater monitoring will be conducted on a semi-annual basis for a period of three (3) years to demonstrate attenuation

and/or stabilization of regulated COCs and to confirm the results of the groundwater fate and transport model. The monitoring program will be terminated by the end of the three (3) year period if regulated COC concentrations are below Type 5 RRS; have stabilized and/or decreased over time; and are consistent with values predicted by the groundwater fate and transport model.

6.2 Institutional Controls

Soil and groundwater contamination will be subject to Type 5 RRS. The Type 5 RRS allows contamination to remain in place, provided the principal threats at the site are mitigated by engineering and institutional controls. An environmental covenant will likely be executed on the site in conformance with O.C.G.A. § 44-61-1, et seq., the "Georgia Uniform Environmental Covenants Act." This covenant will require that the site land use remain industrial and no drinking water well will be installed on-site. Other controls could include, but are not limited to, abandonment of the on-site water well, restricted access, and additional 24-hour security measures.

7.0 MILESTONE SCHEDULE

The schedule for the implementation of the Voluntary Investigation and Remediation Plan is presented in Appendix E. Progress reports will be submitted to the Georgia EPD on a semi-annual basis during the implementation period until the final VRP compliance status report (CSR) is submitted. A discussion of the VRP milestones is below:

- **Identification of Regulated COCs in Soil and Groundwater** – Identification of the applicable COCs will occur immediately following VRP enrollment. It is likely that this information will be acquired within 6 months after VRP enrollment and presented in Semi-Annual Progress Report No. 1.
- **Source Zone Soil Profiling and Slug Testing** – Source zone soil profiling and slug testing activities will be conducted in conjunction with identification of the applicable COCs. This information will be developed within 6 months after VRP enrollment and presented in Semi-Annual Progress Report No. 1.
- **On-site Horizontal/Vertical Delineation of Soil and Groundwater Impacts** – The results of on-site soil and groundwater delineation will be completed within the 12 month period specified under the VRP. The results of the delineation effort will be presented in Semi-Annual Progress Report No. 2.
- **Off-site Horizontal/Vertical Delineation of Soil and Groundwater Impacts** – The results of off-site soil and groundwater delineation will be completed within the 24 month period specified under the VRP. The results of the delineation effort will be presented in Semi-Annual Progress Report No. 4.

- **Updated CSM Submittal with Final Remediation Plan** – An updated CSM and final remediation plan will be submitted as part of Semi-Annual Progress Report No. 5 within 30 months following VRP enrollment. A Uniform Environmental Covenant will be prepared and executed in conjunction with this submittal.
- **VRP Compliance Status Report** – A VRP CSR certifying compliance with applicable rules and regulations will be submitted within 60 months following VRP enrollment.

8.0 REFERENCES

- Chowns, T.M., and Williams, C.T., 1983, Pre-Cretaceous rocks beneath the Georgia Coastal Plain- Regional Implications: *in* Gohn, G.S., *ed.,* Studies related to the Charleston, South Carolina Earthquake of 1886-tectonics and seismicity: U.S. Geologic Survey Professional Paper, p. L1- L42
- Clarke, J.S., Hacke, C.M., and Peck, M.F., 1990, Geology and Ground-Water Resources of the Coastal Area of Georgia: Georgia Geologic Survey Bulletin 113, 106 pages.
- Clarke, J.S., Cherry, G.C., and Gonthier, G.J., 2011, Hydrogeology and water quality of the Floridan aquifer system and effects of Lower Floridan aquifer pumping on the Upper Floridan aquifer at Fort Stewart, Georgia: U.S. Geological Survey Scientific Investigations Report 2011–5065, p. 59
- Clarke, W.Z., and Zisa, A.C., 1976, *Physiographic Map of Georgia*: Georgia Department of Natural Resources, 1 plate.
- Counts, H.B., and Donsky, E., 1963, Salt-water encroachment, geology, and ground-water resources of the Savannah area, Georgia and South Carolina: U.S. Geological Survey Water Supply Paper 1611, 100 pages, 6 plates, 9 figures.
- Furlow, J.W., 1969, Stratigraphy and Economic Geology of the Eastern Chatham County Phosphate Deposit: Georgia Department of Natural Resources, Division of Mines, Mining, and Geology Bulletin 82, 40 pages.
- Georgia Department of Natural Resources (GDNR), 1976, Geologic Map of Georgia, Atlanta, Georgia.
- Herrick, S.M., 1961, Well Logs of the Coastal Plain of Georgia: Georgia Geologic Survey Bulletin 70, 426 p.
- Herrick, S.M., 1965, A subsurface study of Pleistocene deposits in coastal Georgia: Georgia Dept. of Natural Resources, Division of Mines, Mining, and Geology Information Circular 31, 8 p.

- Herrick, S.M., and Vorhes, R.C., 1963, Subsurface Geology of the Georgia Coastal Plain, Georgia: State Division Conservation, Department of Mines, Mining and Geology, Geological Survey Information Circular 25, 79 p.
- Huddlestun, P.F., 1988, A revision of the Lithostratigraphic Units of the Coastal Plain of Georgia, the Miocene through Holocene: Georgia Geologic Survey Bull 104, 162 p.
- Krause, R.E., and Randolph, R.B., 1989, Hydrology of the Floridian Aquifer System in Southeast Georgia and Adjacent Parts of Florida and South Carolina: U.S. Geologic Survey Professional Paper 1403-D, 65 pages.
- Miller, J. A., 1986, Hydrogeologic framework of the Floridan aquifer system in Florida and parts of Georgia, Alabama, and South Carolina: U.S. Geological Survey Professional Paper 1403-B, 91 pages.
- United States Geologic Survey (USGS), 2017, National Water Information System: Mapper.
- Weems, R.E., and Edwards, L.E., 2001, Geology of Oligocene, Miocene, and Younger Deposits in the Coastal Area of Georgia: Georgia Geologic Survey Bulletin 131, 124 p.
- Williams, L.J., and Gill, H.E., 2010, Revised hydrogeologic framework of the Floridan aquifer system in the northern coastal area of Georgia and adjacent parts of South Carolina: U.S. Geological Survey Scientific Investigations Report 2010–5158, 103 p., 3 plates.

APPENDIX A

VOLUNTARY REMEDIATION PROGRAM APPLICATION AND CHECKLIST

Voluntary Investigation and Remediation Plan Application Form and Checklist

VRP APPLICANT INFORMATION					
COMPANY NAME	Royal Transportation Services, Inc.				
CONTACT PERSON/TITLE	Oscar Acharandio				
ADDRESS	10800 NW South River Drive, Miami, FL 33178				
PHONE	(305) 884 4186	FAX		E-MAIL	oscar@protransportusa.com

GEORGIA CERTIFIED PROFESSIONAL GEOLOGIST OR PROFESSIONAL ENGINEER OVERSEEING CLEANUP					
NAME	William S. Anderson, III, PE			GA PE/PG NUMBER	PE020997
COMPANY	Terracon Consultants, Inc.				
ADDRESS	2201 Rowland Avenue, Savannah, GA 31404				
PHONE	(912) 629 4000	FAX	(912) 629-4001	E-MAIL	wsanderson@terracon.com

APPLICANT'S CERTIFICATION

In order to be considered a qualifying property for the VRP:

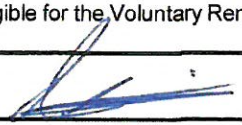
(1) The property must have a release of regulated substances into the environment;
(2) The property shall not be:
- (A) Listed on the federal National Priorities List pursuant to the federal Comprehensive Environmental Response, Compensation, and Liability Act, 42 U.S.C. Section 9601.
- (B) Currently undergoing response activities required by an order of the regional administrator of the federal Environmental Protection Agency; or
- (C) A facility required to have a permit under Code Section 12-8-66.

(3) Qualifying the property under this part would not violate the terms and conditions under which the division operates and administers remedial programs by delegation or similar authorization from the United States Environmental Protection Agency.
(4) Any lien filed under subsection (e) of Code Section 12-8-96 or subsection (b) of Code Section 12-13-12 against the property shall be satisfied or settled and released by the director pursuant to Code Section 12-8-94 or Code Section 12-13-6.

In order to be considered a participant under the VRP:
- (1) The participant must be the property owner of the voluntary remediation property or have express permission to enter another's property to perform corrective action.
- (2) The participant must not be in violation of any order, judgment, statute, rule, or regulation subject to the enforcement authority of the director.

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

I also certify that this property is eligible for the Voluntary Remediation Program (VRP) as defined in Code Section 12-8-105 and I am eligible as a participant as defined in Code Section 12-8-106.

APPLICANT'S SIGNATURE			
APPLICANT'S NAME/TITLE (PRINT)	Oscar Acharandio / President	DATE	1/29/18

QUALIFYING PROPERTY INFORMATION (For additional qualifying properties, please refer to the last page of application form)				
HAZARDOUS SITE INVENTORY INFORMATION (if applicable)				
HSI Number	10867	Date HSI Site listed	7/27/2007	
HSI Facility Name	Coastal Concrete, Inc.	NAICS CODE	N/A	
PROPERTY INFORMATION				
TAX PARCEL ID	2-0599-01-010	PROPERTY SIZE (ACRES)	4.923	
PROPERTY ADDRESS	2337 Louisville Road			
CITY	Savannah	COUNTY	Chatham	
STATE	Georgia	ZIPCODE	31415	
LATITUDE (decimal format)	32.081988	LONGITUDE (decimal format)	-81.129108	
PROPERTY OWNER INFORMATION				
PROPERTY OWNER(S)	Royal Transportation Services, Inc.	PHONE #	(305) 884 4186	
MAILING ADDRESS	10800 NW South River Drive			
CITY	Miami	STATE/ZIPCODE	Florida/33178	

ITEM #	DESCRIPTION OF REQUIREMENT	Location in VRP (i.e. pg., Table #, Figure #, etc.)	For EPD Comment Only (Leave Blank)
1.	**$5,000 APPLICATION FEE** IN THE FORM OF A CHECK PAYABLE TO THE GEORGIA DEPARTMENT OF NATURAL RESOURCES. (PLEASE LIST CHECK DATE AND CHECK NUMBER IN COLUMN TITLED "LOCATION IN VRP." PLEASE DO NOT INCLUDE A SCANNED COPY OF CHECK IN ELECTRONIC COPY OF APPLICATION.)	Check included with submittal. Check No. Date:	
2.	**WARRANTY DEED(S)** FOR QUALIFYING PROPERTY.	Appendix B	
3.	**TAX PLAT** OR OTHER FIGURE INCLUDING QUALIFYING PROPERTY BOUNDARIES, ABUTTING PROPERTIES, AND TAX PARCEL IDENTIFICATION NUMBER(S).	Appendix C Figure 2	
4.	**ONE (1) PAPER COPY AND TWO (2) COMPACT DISC (CD) COPIES** OF THE VOLUNTARY REMEDIATION PLAN IN A SEARCHABLE PORTABLE DOCUMENT FORMAT (PDF).	Included with submittal.	
5.	The VRP participant's initial plan and application must include, using all reasonably available current information to the extent known at the time of application, a graphic three-dimensional preliminary conceptual site model (CSM) including a preliminary remediation plan with a table of delineation standards, brief supporting text, charts, and figures (no more than 10 pages, total) that illustrates the site's surface and subsurface setting, the known or suspected source(s) of contamination, how contamination might move within the environment, the potential human health and ecological receptors, and the complete or incomplete exposure pathways that may exist at the site; the preliminary CSM must be updated as the investigation and remediation progresses and an up-to-date CSM must be included in each semi-annual status report submitted to the director by the participant; a **PROJECTED MILESTONE SCHEDULE** for investigation and remediation of the site, and after enrollment as a participant, must update the schedule in each semi-annual status report to the director describing implementation of the plan	Sections 4 & 7 Appendices C - E	

	during the preceding period. A Gantt chart format is preferred for the milestone schedule. The following four (4) generic milestones are required in all initial plans with the results reported in the participant's next applicable semi-annual reports to the director. The director may extend the time for or waive these or other milestones in the participant's plan where the director determines, based on a showing by the participant, that a longer time period is reasonably necessary:		
5.a.	Within the first 12 months after enrollment, the participant must complete horizontal delineation of the release and associated constituents of concern on property where access is available at the time of enrollment;	Section 7 Appendix E	
5.b.	Within the first 24 months after enrollment, the participant must complete horizontal delineation of the release and associated constituents of concern extending onto property for which access was not available at the time of enrollment;	Section 7 Appendix E	
5.c.	Within 30 months after enrollment, the participant must update the site CSM to include vertical delineation, finalize the remediation plan and provide a preliminary cost estimate for implementation of remediation and associated continuing actions; and	Section 7 Appendix E	
5.d.	Within 60 months after enrollment, the participant must submit the compliance status report required under the VRP, including the requisite certifications.	Section 7 Appendix E	
6.	**SIGNED AND SEALED PE/PG CERTIFICATION** AND SUPPORTING DOCUMENTATION: "I certify under penalty of law that this report and all attachments were prepared by me or under my direct supervision in accordance with the Voluntary Remediation Program Act (O.C.G.A. Section 12-8-101, et seq.). I am a professional engineer/professional geologist who is registered with the Georgia State Board of Registration for Professional Engineers and Land Surveyors/Georgia State Board of Registration for Professional Geologists and I have the necessary experience and am in charge of the investigation and remediation of this release of regulated substances. Furthermore, to document my direct oversight of the Voluntary Remediation Plan development, implementation of corrective action, and long term monitoring, I have attached a monthly summary of hours invoiced and description of services provided by me to the Voluntary Remediation Program participant since the previous submittal to the Georgia Environmental Protection Division. The information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations." William S. Anderson III 12-6-18 Printed Name and GA PE/PG Number Date Signature and Stamp GEORGIA REGISTERED No. 20997 PROFESSIONAL ENGINEER WILLIAM S. ANDERSON III		

APPENDIX B

TAX PLAT AND WARRANTY DEED

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2-0599-01-010

Property Record Card

2337 LOUISVILLE RD SAVANNAH

APPRAISER	ALCUMMIN	LOT 2 RECOMBINATION OF LOTS 2B-2 2B-3, 2A-1, 2B-1 & 2B-2 MEDDIN TRACT PRB 32P 98 4.923 ac	ROYAL TRANSPORTATION SERVICES INC 10800 NW SOUTH RIVER DR MIAMI FL 33178	CAMA	ASMT		
LAST INSP	12/30/2015			707,200	707,200	LAND	1
APPR ZONE	000009			25,700	25,700	BLDG	3
				3,800	3,800	OBXF	1
				736,700	736,700	Cost - MS	

SALES	BOOK / PAGE	INS	VI	QU	RSN	PRICE
24 Dec 2012	383V 873	WD	I	Q		500,000
GRANTOR:COASTAL CONCRETE INC *GRANTEE:ROYAL TRANSPORT SERVICES INC*						
09 Jan 2008	337H 0184	WD	I	U	UR	459,600
GRANTOR:COASTAL CONCRETE SE LLC *GRANTEE:COASTAL CONCRETE INC*						
28 Feb 2007	323H 0679	WD	I	U	UF	460,000
GRANTOR:COASTAL CONCRETE INC *GRANTEE:COASTAL CONCRETE SE LLC*						
30 Jun 2005	290G 545	WD	I	Q	QX	200,000
GRANTOR:TURNER ENTERPRISES OF SAV *GRANTEE:COASTAL CONCRETE INC*						
14 Sep 2001	22O 0425	QC	I	U	U8	
GRANTOR:SAVANNAH CONCRETE INC *GRANTEE:TURNER ENTERPRISES OF SAV*						
03 Sep 1999	206K 0592	WD	I	Q	QX	170,000
GRANTOR:LAWRENCE C LEE *GRANTEE:SAVANNAH CONCRETE INC*						
12 Aug 1977	109B 0678	WD	I	Q	QX	41,000
GRANTOR:MEDDIN ENTERPRISES, INC. *GRANTEE:LAWRENCE C. LEE*						

Picture Unavailable

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CODES		
PROPERTY USE	0004	INDUSTRIAL
UTA	0002	Savannah
NBHD	009800.00	I800 TELFAIR RD/LOUI
EXEMPTIONS		
COMMCATEG	326	Storage Garage

HISTORY	LAND	IMPR	TOTAL	
2016	473,300	30,200	503,500	Cama
2015	473,300	31,200	504,500	Cama
2014	467,300	32,700	500,000	Over
2013	467,300	32,700	500,000	Over
2012	473,300	32,700	506,000	Cama
2012	467,300	32,700	500,000	Over
2011	364,100	32,700	396,800	Cama
2010	364,100	32,700	396,800	Cama
2009	364,000	39,500	403,500	Over
2008	364,000	39,500	403,500	Cama

COMMENTS:	
29 Jan 2013	01/28/2013 2012 BOE SHOW CHANGE $500,000.00. STEVE CORCORAN.
08 Nov 2010	COA PER FAX FM ADMINISTER
08 Nov 2010	COA PER FAX FM ADMINISTER
08 Dec 2008	TY09 COA PER LTR FM OWNER 12/8/08 LN
24 Oct 2007	TY08 323H/677
12 Sep 2007	TY08 NEW PIN; RECOMBINATION OF 2-599-1-(5C, 5D, 5E & 7) PRB 32P 98 DEED 323H 677 9/12/07PL

EXTRA FEATURES

ID#	BLDG #	SYSTEM DESC	DIM 1	DIM 2	UNITS	QL	UNIT PRICE	RCN	AYB	EYB	DT	ECON	FUNC	SP	SP%	RCNLD	MKT VALUE
113323	70718	CONCRETE PAVE 500	0	0	7724.00	3	2.73	21,087	1940	1940	35					4,217	3,800

LAND

ID#	USE DESC	FRONT	DEPTH	UNITS / TYPE	PRICE	ZONING	LCTN	TOPO	OTHER	ADJ1	ADJ2	ADJ3	ADJ4	MKT VALUE
89995	Industrial 1	0	0	214,315.00-SF	2.75	I-H				CN20				707200

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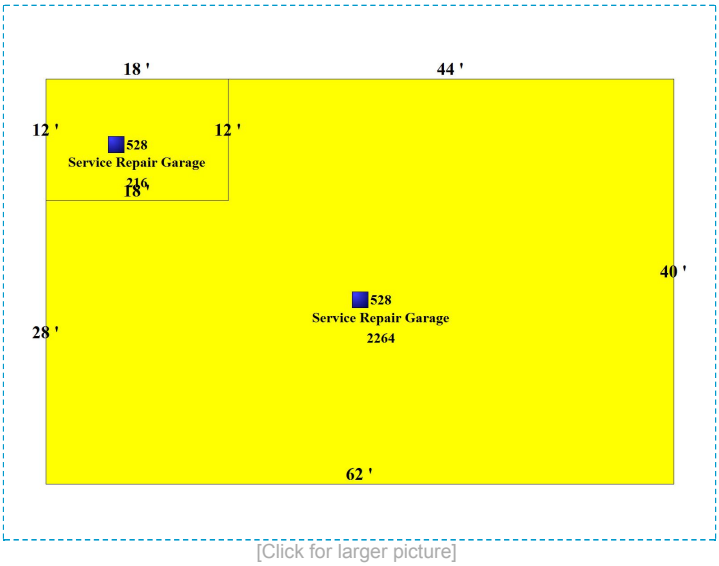
BUILDING SECTION 70718-1-2017	CONSTRUCTION TYPE	RCN	AYB	EYB	DEP TYPE	PHYS	ECON	FUNC	OBSV / %	TOTAL DEP %	RCNLD	U.FACTOR	MKT VAL
	Commercial	110,980	1948	1980	MS	79.00	0.00	0.00	0.00	79.00	23,306	1.00	23,306



[Click for larger picture]

AREA	2480
STORIES	1.0
PERIMETER / SHAPE	264

OCCUPANCIES		AREA	%	CLASS	HEIGHT	QUAL
528	Service Repair Garage	2264	91.29	C	14.00	1.00
528	Service Repair Garage	216	8.71	C	14.00	1.00

COMPONENTS			Units	%	QUAL
C1	882	Stud -Brick Veneer		100.00	

Service Garage (Building #1). One story brick; 14' height; built in 1948; reinforced concrete slab; two plumbing fixtures; metal roof; no heating; one OHD 11' X 14'; one OHD 11' X 12'; 216 square feet of office space; no insulation; 15' X 28' shed at

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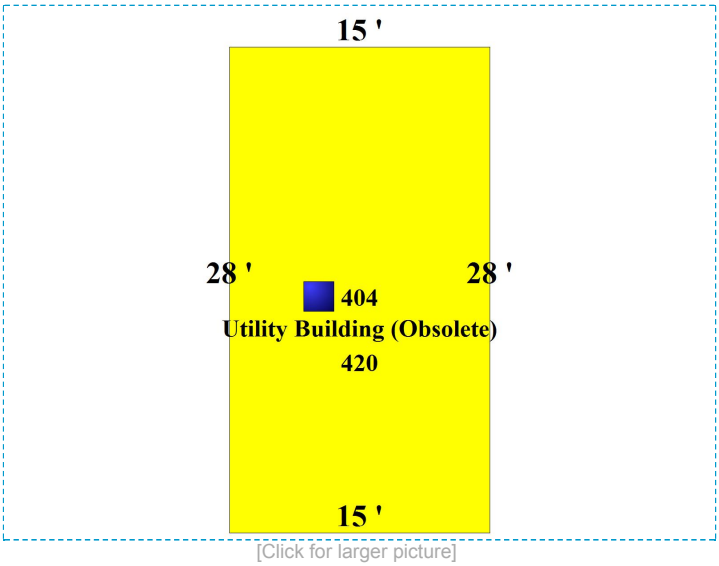
BUILDING SECTION 70719-1-2017	CONSTRUCTION TYPE	RCN	AYB	EYB	DEP TYPE	PHYS	ECON	FUNC	OBSV / %	TOTAL DEP %	RCNLD	U.FACTOR	MKT VAL
	Commercial	11,794	1990		MS	80.00	0.00	0.00	0.00	80.00	2,359	1.00	2,359



[Click for larger picture]

Equiptment Shed (Building #2). One story concrete block; 6' height; estimated year built: 1990; located atthe rear of Building #1. See "DRAW" Screen #3 for "Plot Plan".

AREA	420
STORIES	1.0
PERIMETER / SHAPE	86

OCCUPANCIES	AREA	%	CLASS	HEIGHT	QUAL
404 Utility Building (Obsolete)	420	100.00	C	8.00	2.00

COMPONENTS			Units	%	QUAL
C1	812	Concrete Block		100.00	

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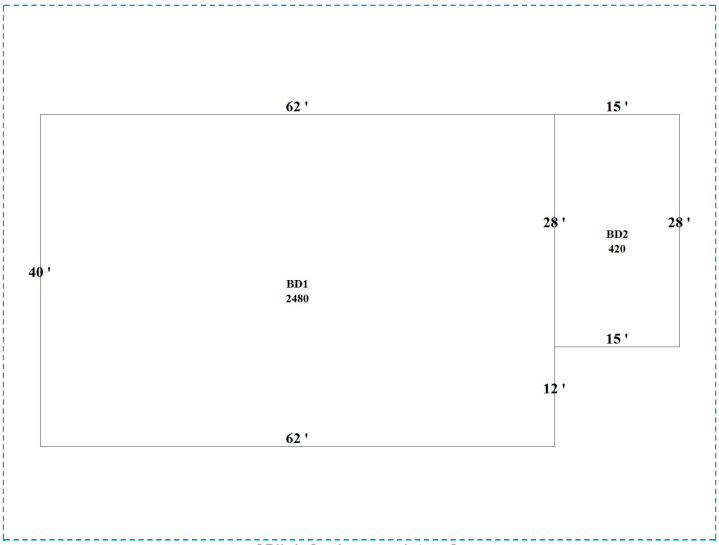
2-0599-01-010

2337 LOUISVILLE RD SAVANNAH

BUILDING SECTION 70720-1-2017	CONSTRUCTION TYPE	RCN	AYB	EYB	DEP TYPE	PHYS	ECON	FUNC	OBSV / %	TOTAL DEP %	RCNLD	U.FACTOR	MKT VAL
	Drawing Only	NaN			MS		0.00	0.00	0.00		NaN		NaN



[Click for larger picture]

"DRAW" Screen #4 - "Plot Plan". BD1 represents Building #1. BD2 represents Building #2.

COMPONENTS	Units	%	QUAL

Clock#: 1477820
FILED FOR RECORD

1/03/2013 01:33pm

PAID: 16.00

Daniel W. Massey, Clerk
Superior Court of Chatham County
Chatham County, Georgia

Real Estate Transfer Tax

PAID $$500.00

Deputy Clerk, Superior Court

BOOK 383 V PAGE 873

Prepared by and return to:
Edwin W. King, Jr., P.C. Post Office Box 9873
Savannah, GA 31412

STATE OF GEORGIA)
)
COUNTY OF CHATHAM)

LIMITED WARRANTY DEED

KNOW ALL MEN BY THESE PRESENTS, that **COASTAL CONCRETE, INC.,** a South Carolina corporation ("Grantor"), for and in consideration of the sum of FIVE HUNDRED THOUSAND AND 00/100 DOLLARS ($500,000.00), to it paid by **ROYAL TRANSPORTATION SERVICES, INC.,** a Florida corporation, with an address of 10800 N.W. South River Drive, Miami, FL 33178m ("Grantee"), in the State aforesaid, the receipt of which is hereby acknowledged, subject to the Permitted Exceptions set forth on Exhibit B and incorporated herein by reference, has granted, bargained, sold and released, and, subject to the Permitted Exceptions set forth on Exhibit B and incorporated herein by reference, by these presents does grant, bargain, sell and release unto the Grantee, and Grantee's successors and assigns, the property described on Exhibit A attached hereto and incorporated herein by reference, (the "Property").

This conveyance is made subject to the Permitted Exceptions as set forth on Exhibit B attached hereto and incorporated herein by reference.

TOGETHER with all and singular, the rights, members, hereditaments and appurtenances to the said premises belonging or in anywise incident or appertaining,.

TO HAVE AND TO HOLD, all and singular the premises before mentioned, unto the said GRANTEE, Its Successors and Assigns forever.

And Grantor does hereby bind Grantor and Grantor's Successors and Assigns to warrant and forever defend all and singular the said premises unto the said Grantee and the Grantee's Successors and Assigns against the Grantor and the Grantor's Successors and Assigns, so that neither Grantor nor those claiming under Grantor shall hereafter have any interest in or claim the same or any part thereof.

IN WITNESS WHEREOF, Grantor has caused this Limited Warranty Deed to be executed in its name and its seal affixed hereto as of December 24, 2012.

Sworn to and subscribed before me
this 24 day of December, 2012.

Witness

Notary Public for South Carolina
My Commission Expires: 10-12-17
[NOTARIAL SEAL]

NOTARY SEAL

COASTAL CONCRETE, INC.

By: _____
Robert B. Glover

Its: President

BOOK 383 V PAGE 874

EXHIBIT "A"

ALL that certain lot, tract or parcel of land, lying and being in Chatham County, Georgia, known as Lot 2, consisting of 4.923 acres, on a Survey entitled "A Revision to a Minor Recombination of Parcels 2B-2 & 2B-3 and 2A-1, 2B-1 & 2B-2, Meddin Tract, 8th G.M. District, City of Savannah, Chatham County, Georgia," prepared by Savannah Concrete, by Terry Mack Coleman, G.R.L.S. No. 2486, dated February 18, 2006, and recorded at Plat Book 32-P, Page 98, Chatham County, Georgia records.

Said property having a street address of 2337 Louisville Road, Savannah, Georgia 31401 and a PIN # of 20599 01010.

EXHIBIT "B"

1. Real estate taxes and assessments for the year 2013 and subsequent years, not yet due and payable.

2. Access and utility easement granted to Savannah Electric and Power Company, recorded in Chatham County Records in Deed Book 109L; Page 640.

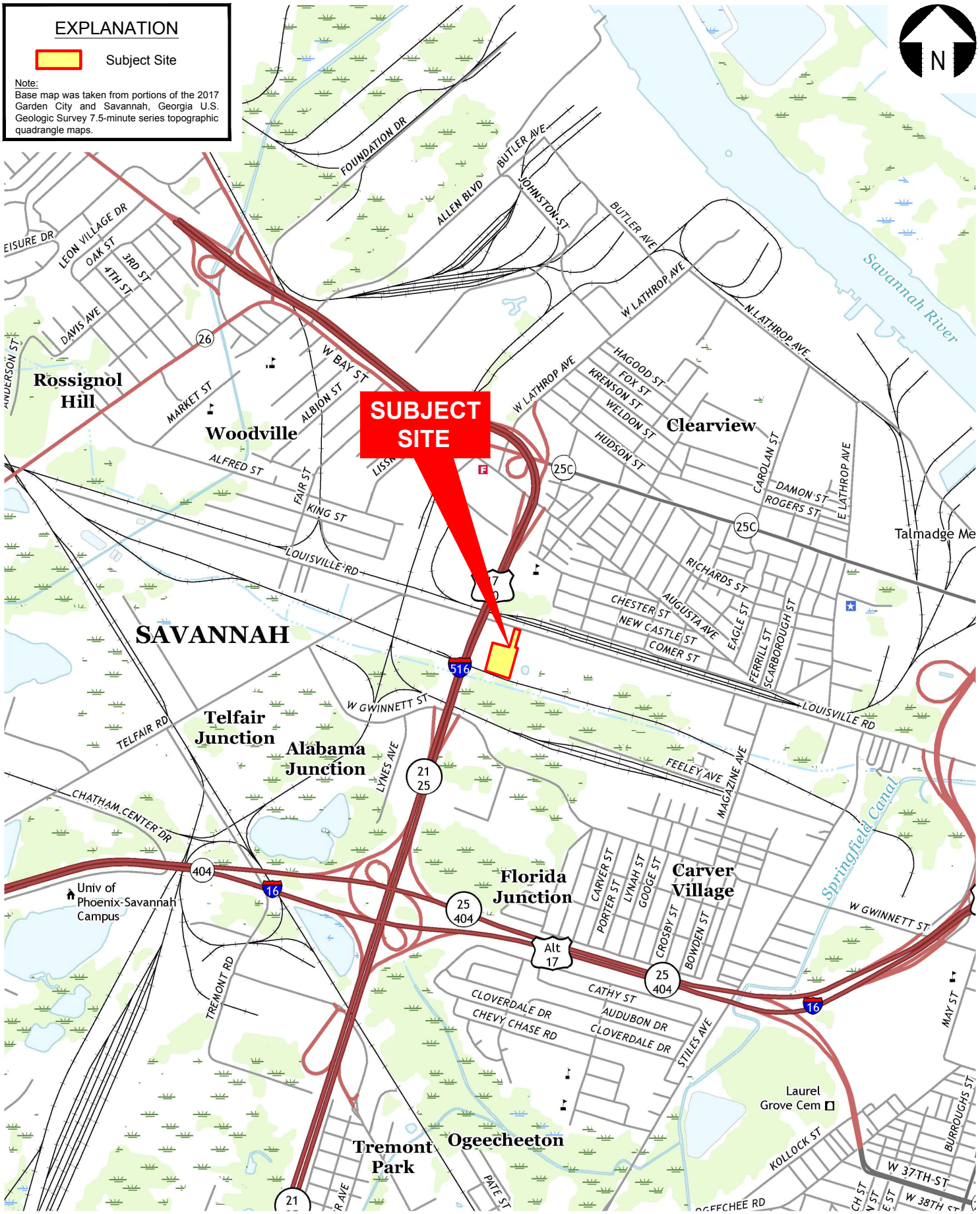
3. Boundary Line Agreement referenced in Plat prepared by Roy Hussey and recorded in Deed Book AA, Page 233, aforesaid records.

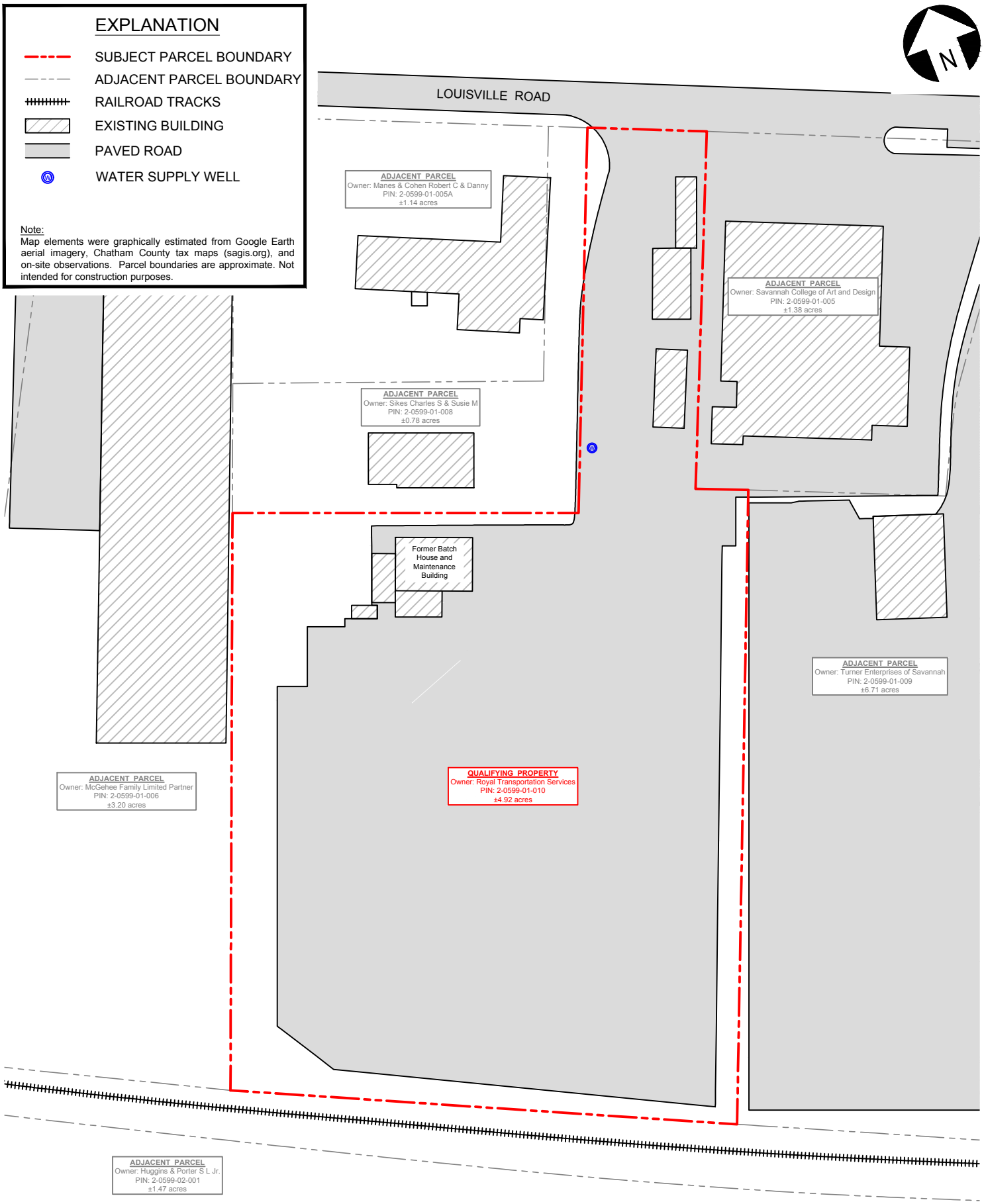
4. Access and utility easement granted to Savannah Electric and Power Company, recorded in Deed Book 62I, Page 288, aforesaid records.

5. Access and utility easement retained by Meddin Enterprises, Inc., recorded in Deed Book 109B, Page 678.

APPENDIX C

FIGURES


EXPLANATION
Subject Site
Note:
Base map was taken from portions of the 2017 Garden City and Savannah, Georgia U.S. Geologic Survey 7.5-minute series topographic quadrangle maps.
N
SUBJECT SITE
Savannah River
Springfield Canal
Rossignol Hill
Woodville
Clearview
Talmadge Me
SAVANNAH
Telfair Junction
Alabama Junction
Florida Junction
Carver Village
Tremont Park
Ogeecheeton
Laurel Grove Cem
Univ of Phoenix-Savannah Campus
FOUNDATION DR
BUTLER AVE
ALLEN BLVD
JOHNSTON ST
W LATHROP AVE
N LATHROP AVE
E LATHROP AVE
HAGOOD ST
FOX ST
KRENSON ST
WELDON ST
HUDSON ST
CAROLAN ST
DAMON ST
ROGERS ST
RICHARDS ST
CHESTER ST
NEW CASTLE ST
COMER ST
AUGUSTA AVE
EAGLE ST
FERRILL ST
SCARBOROUGH ST
LOUISVILLE RD
W BAY ST
ALBION ST
MARKET ST
ALFRED ST
FAIR ST
KING ST
LISBON ST
ANDERSON ST
LEON VILLAGE DR
OAK ST
3RD ST
4TH ST
DAVIS AVE
EISURE DR
W GWINNETT ST
TELFAIR RD
LYNES AVE
CHATHAM CENTER DR
FEELEY AVE
MAGAZINE AVE
CARVER ST
PORTER ST
LYNAH ST
GOOGE ST
CROSBY ST
BOWDEN ST
CATHY ST
AUDUBON DR
CLOVERDALE DR
CHEVY CHASE RD
STILES AVE
TREMONT RD
MAY ST
KOLLOCK ST
BURROUGHS ST
W 37TH ST
W 38TH ST
PATE ST
OGEECHEE RD
26
25C
516
21
25
404
Alt 17
16
0 1,000' 2,000'
1" = 2,000'
SCALE IN FEET
Project Mngr: RLB
Drawn By: VMG
Checked By: RLB
Approved By: WSA
Project No. ES127009
Scale: 1" = 2,000'
File Name: ES127009.dwg
Date: December 19, 2017
Terracon
Consulting Engineers & Scientists
2201 Rowland Avenue Savannah, Georgia 31404
Phone (912) 629 4000 Fax. (912) 629 4001
SITE LOCATION MAP
Coastal Concrete Site
2337 Louisville Road
Savannah, Chatham County, Georgia
Figure
1



Project Mngr:	RLB
Drawn By:	VMG
Checked By:	RLB
Approved By:	WSA

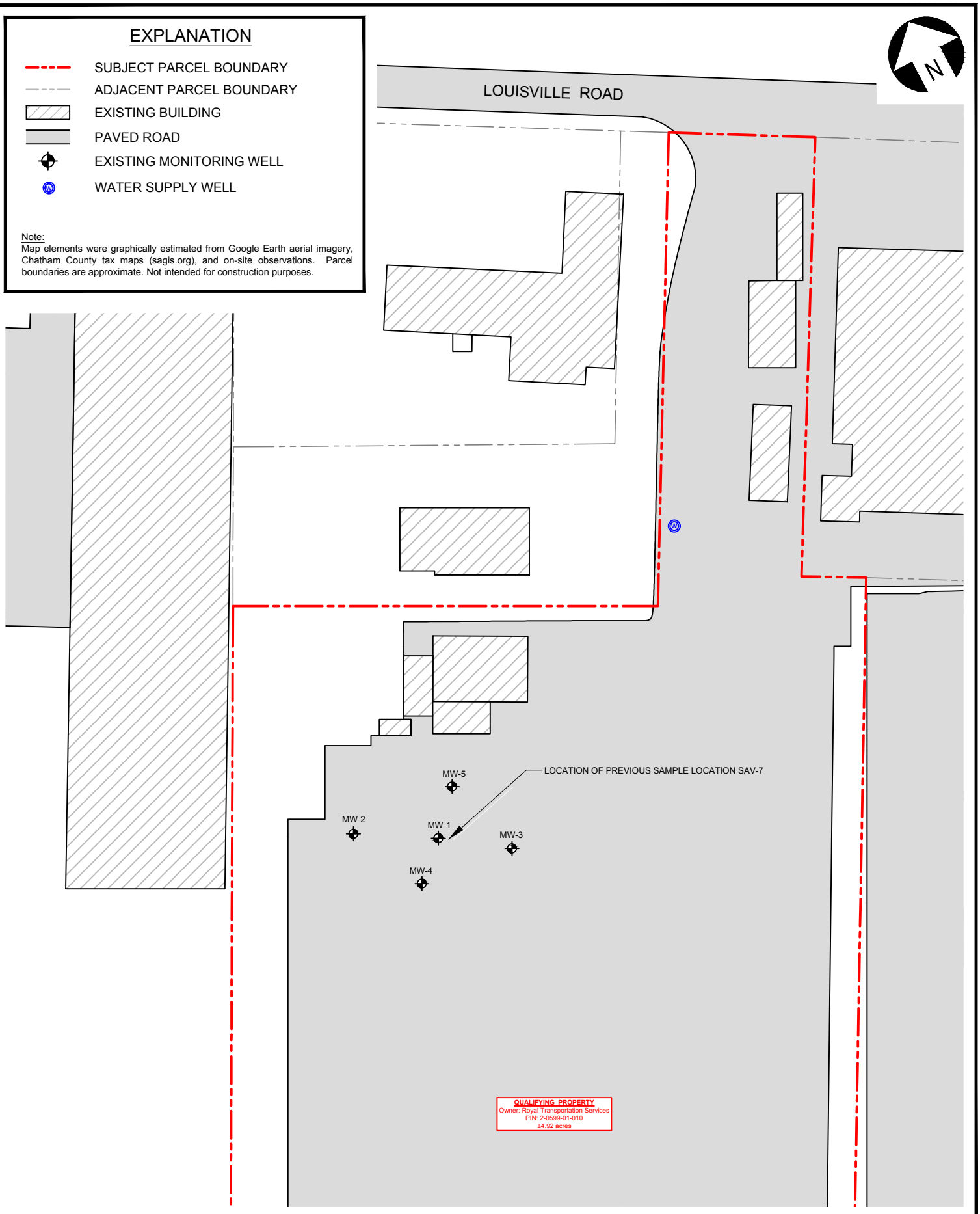
Project No.	ES127009
Scale:	1" = 100'
File Name:	ES127009.dwg
Date:	December 19, 2017

Terracon
Consulting Engineers & Scientists
2201 Rowland Avenue Savannah, Georgia 31404
Phone (912) 629 4000 Fax. (912) 629 4001

SITE VICINITY MAP

Coastal Concrete Site
2337 Louisville Road
Savannah, Chatham County, Georgia

Figure
2



0 25' 50'
1" = 50'
SCALE IN FEET

Project Mngr:	RLB
Drawn By:	VMG
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Phone (912) 629 4000 Fax. (912) 629 4001

SITE DIAGRAM

Coastal Concrete Site
2337 Louisville Road
Savannah, Chatham County, Georgia

Figure
3

EXPLANATION

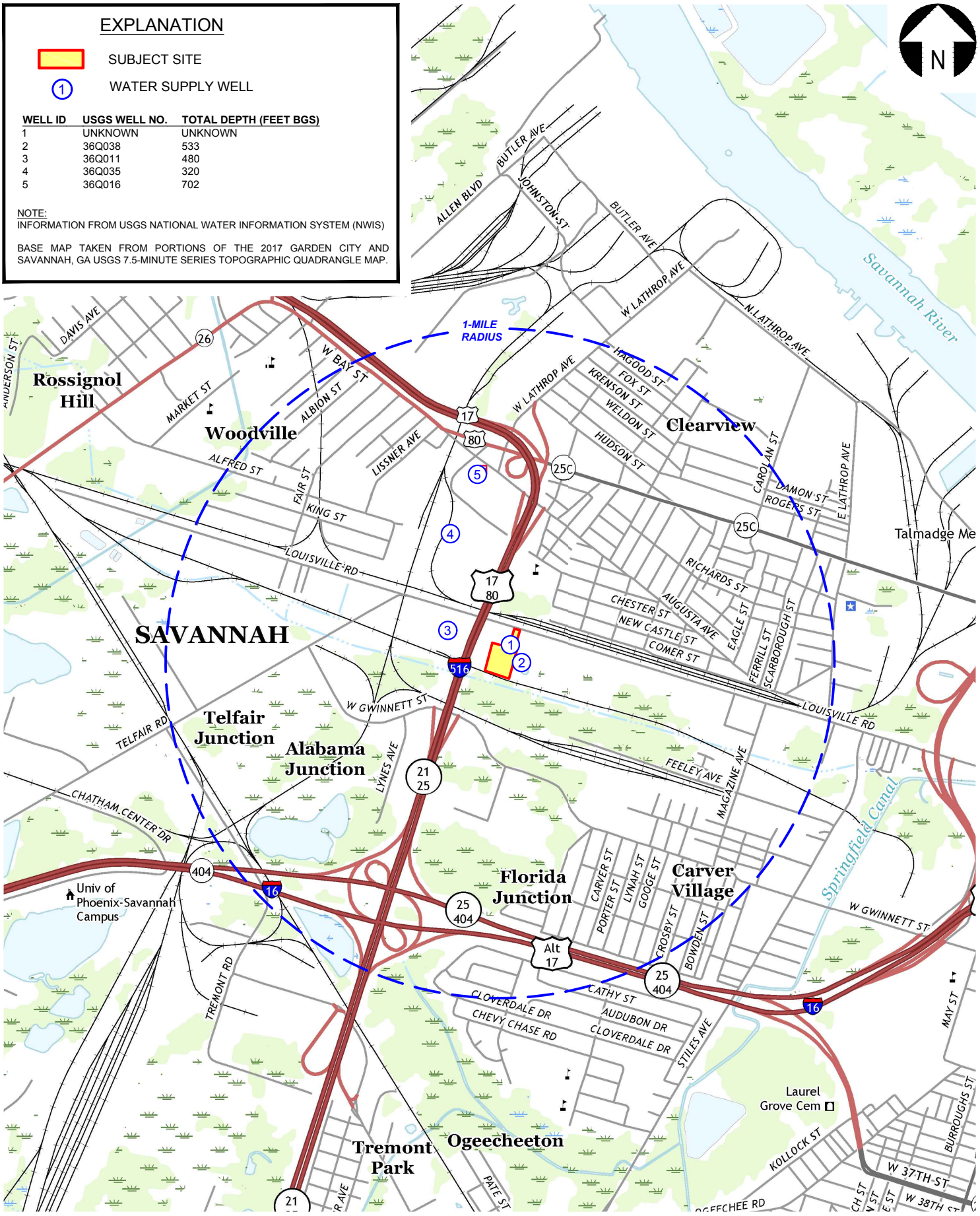
SUBJECT SITE

(1) WATER SUPPLY WELL

WELL ID	USGS WELL NO.	TOTAL DEPTH (FEET BGS)
1	UNKNOWN	UNKNOWN
2	36Q038	533
3	36Q011	480
4	36Q035	320
5	36Q016	702

NOTE:
INFORMATION FROM USGS NATIONAL WATER INFORMATION SYSTEM (NWIS)

BASE MAP TAKEN FROM PORTIONS OF THE 2017 GARDEN CITY AND SAVANNAH, GA USGS 7.5-MINUTE SERIES TOPOGRAPHIC QUADRANGLE MAP.



0 1,000' 2,000'
1" = 2,000'
SCALE IN FEET

Project Mngr:	RLB
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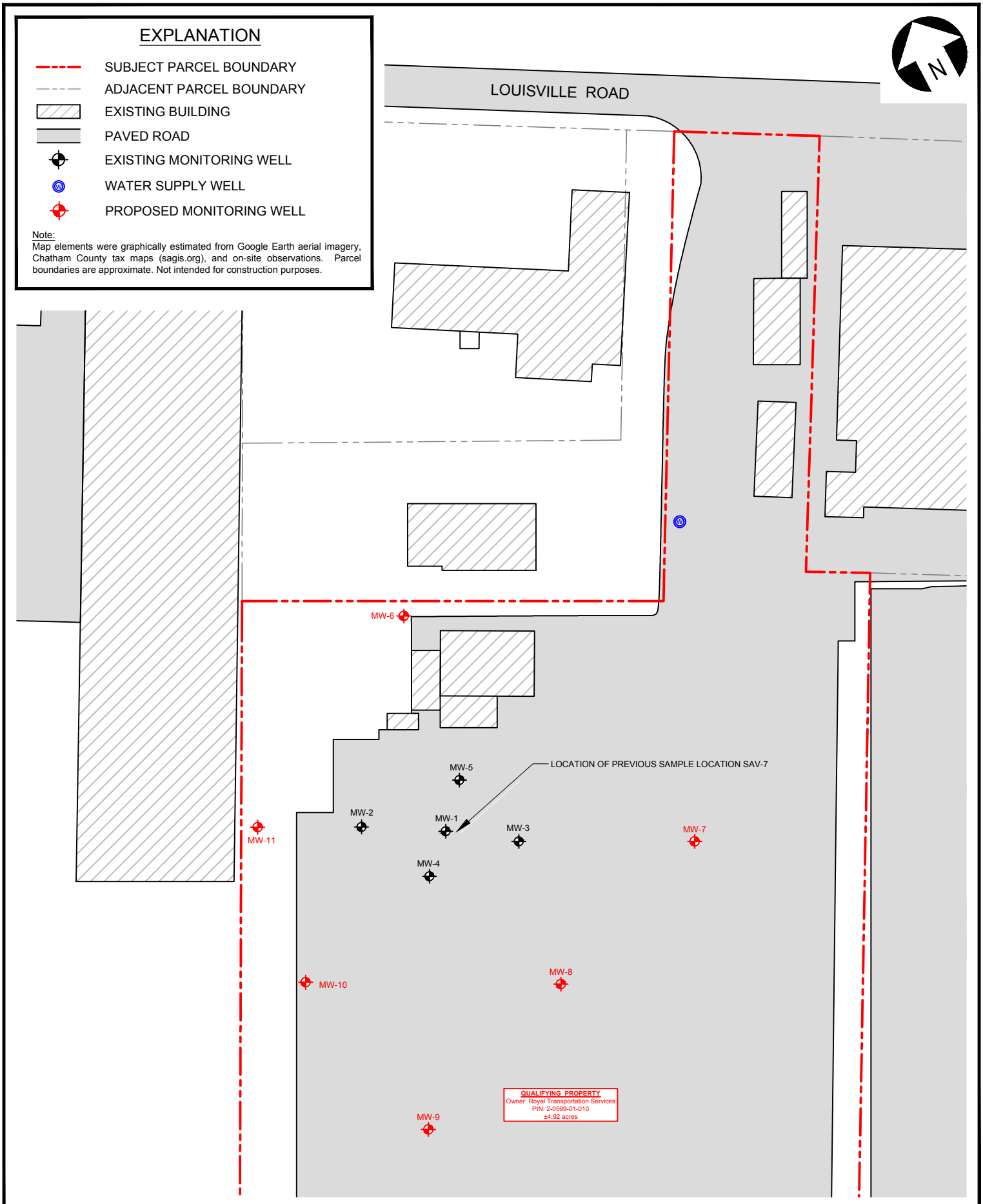
2201 Rowland Avenue Savannah, Georgia 31404
Phone (912) 629 4000 Fax. (912) 629 4001

WATER WELL SURVEY

Coastal Concrete Site
2337 Louisville Road
Savannah, Chatham County, Georgia

Figure 4



0 25' 50'

1" = 50'

SCALE IN FEET

Project Mngr:	RLB
Drawn By:	VMG
Checked By:	RLB
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Project No.	ES127009
Scale:	1" = 50'
File Name:	ES127009.dwg
Date:	December 19, 2017

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2201 Rowland Avenue Savannah, Georgia 31404
Phone (912) 629 4000 Fax. (912) 629 4001

PROPOSED VRP INVESTIGATION PLAN

Coastal Concrete Site
2337 Louisville Road
Savannah, Chatham County, Georgia

Figure
5

APPENDIX D

LIMITED PHASE II SITE INVESTIGATION REPORT (MARCH 2012)

LIMITED PHASE II SITE INVESTIGATION REPORT

2333 Louisville Road
Savannah, Chatham County, Georgia

March 30, 2012
Terracon Project No. ES127009

Prepared for:
Mr. Oscar Acharandio
PRO Transport USA
10800 N.W. South River Drive
Miami, Florida 33178

Prepared by:
Terracon Consultants, Inc.
Savannah, Georgia

March 30, 2012

PRO Transport USA
10800 N.W. South River Drive
Miami, Florida 33178

Attn: Mr. Oscar Acharandio
P: (305) 881 1186
E: Oscar@protransportusa.com

Re: Limited Phase II Site Investigation Report
2333 Louisville Road
Savannah, Georgia
Terracon Project No.: ES127009

Dear Mr. Acharandio:

Terracon Consultants, Inc. (Terracon) has completed a Limited Phase II Site Investigation for the above-referenced project. The purpose of this study was to evaluate the subsurface environmental conditions at the site in order to determine the soil and groundwater impacts in the vicinity of past noted contamination and was performed in accordance with your authorization to proceed.

We appreciate the opportunity to be of service to you on this project. If you have any questions concerning this report, or if we may be of further service, please contact us.

Sincerely,
Terracon Consultants, Inc.

Luke Bragg
Staff Environmental Engineer

William S. Anderson, III, P.E.
Senior Principal

Enclosures
cc: 1 – Client (PDF)
1 – File

TABLE OF CONTENTS

LIMITED PHASE II SITE INVESTIGATION REPORT
2333 LOUISVILLE ROAD
Savannah, Georgia
Terracon Project No. ES127009
March 30, 2012

1.0 INTRODUCTION

A Limited Phase II Site Investigation has been completed for the property at 2333 Louisville Road in Savannah, Georgia.

ITEM	DESCRIPTION
Location	The subject site is the Former Coastal Concrete facility located at 2333 Louisville Road in Savannah, Georgia. The project study area consists of approximately one (1) acre.
Existing improvements	The site was developed as a concrete batching facility with associated buildings and production equipment. The surrounding area consists of light industrial, commercial, and residential properties.
Current ground cover	The current ground cover consists of crushed stone and concrete paving with grassed areas.
Existing topography	The project site is relatively level.

The subject site is located at 2333 Louisville Road, Savannah, Chatham County Georgia. The site was formerly operated by Coastal Concrete, Inc. as a concrete batching facility. PRO Transport USA is currently leasing the property and is interested in purchasing the subject site.

The site location is depicted on Figure 1 of Appendix A. A Site Plan showing the property configuration and location of soil and water sampling is included as Figure 2 of Appendix A.

1.1 Scope of Work

Terracon conducted a Limited Phase II Site Investigation (LSI) at the request of Mr. Oscar Acharandio. The objective of the LSI was to evaluate the subsurface environmental conditions at the site in order to assist in determining the level of risk the subject property presents and subsequently allow a more streamlined approach to the site's compliance process.

1.2 Standard of Care

Terracon's services were performed in a manner consistent with generally accepted practices of the profession undertaken in similar studies in the same geographical area during the same

time period. Terracon makes no warranties, either express or implied, regarding the findings, conclusions or recommendations. Please note that Terracon does not warrant the work of laboratories, regulatory agencies or other third parties supplying information used in the preparation of the report. These environmental services were performed in accordance with the scope of work agreed with you, our client, as reflected in our proposal and were not bound by ASTM E1903-97.

1.3 Additional Scope Limitations

Findings, conclusions and recommendations resulting from these services are based upon information derived from the on-site activities and other services performed under this scope of work; such information may be subject to change over time. Certain indicators of the presence of hazardous substances, petroleum products, or other constituents may have been latent, inaccessible, unobservable, nondetectable or not present during these services, and we cannot represent that the site contains no hazardous substances, toxic materials, petroleum products, or other latent conditions beyond those identified during this investigation.

Subsurface conditions may vary from those encountered at specific borings or wells or during other surveys, tests, assessments, investigations or exploratory services. The data, interpretations, findings, and our recommendations are based solely upon data obtained at the time and within the scope of these services.

1.4 Reliance

This report has been prepared for the exclusive use of the PRO Transport USA, and any authorization for use or reliance by any other party (except a governmental entity having jurisdiction over the site) is prohibited without the express written authorization of the PRO Transport USA and Terracon. Any unauthorized distribution or reuse is at the client's sole risk. Not withstanding the foregoing, reliance by authorized parties will be subject to the terms, conditions and limitations stated in the proposal, soil and groundwater investigation report, and the Service Agreement between Terracon and PRO Transport USA.

2.0 GEORGIA EPD FILE REVIEW

At the request of the client, a Georgia EPD File Review was conducted and submitted under a separate cover on February 6, 2012. A brief summary of findings is presented below. For a more comprehensive presentation of the findings, please consult the aforementioned report.

- The subject property was purchased by Coastal Concrete, Inc. in 2007.
- A Phase II Environmental Site Assessment was conducted at the property in January 2007. Seven soil samples ranging from 0' to 6' in depth recorded detections of twenty

different volatile or semi-volatile constituents. None of the soil detected constituents were recorded above the Hazardous Site Response Act (HSRA) notification criteria. Four shallow groundwater samples were also collected from the site. Only one of the groundwater samples (SAV-7, located down gradient of the former truck maintenance building) had detected volatile organic compounds above the notification criteria.

- A release notification was submitted to the Georgia EPD on behalf of Coastal Concrete, Inc. on February 9, 2007.
- On May 10, 2007, the Georgia EPD issued an internal memorandum recommending the subject property be listed on the Hazardous Site Inventory. On July 27, 2007, the Georgia EPD listed the property on the Hazardous Site Inventory as Site #10867.
- As of current, the Georgia EPD has not received a Compliance Status Report.

It is Terracon's opinion that at some point in time, the Georgia EPD's Hazardous Site Response Program will require that a Compliance Status Report be submitted, or the Georgia EPD will require corrective action be completed to bring the site into compliance with the appropriate risk reductions standards and then submit a final compliance status report following the completion of corrective action.

3.0 FIELD ACTIVITIES

3.1 Installation of New Monitoring Wells

In conjunction with monitoring well installation, Terracon conducted one cone penetrometer test (CPT) in order to properly characterize the subsurface geology and to predict contaminant migration patterns. Based on the results of the CPT analysis, a confining clay layer exists at approximately fifteen (15) feet below grade (BG), eliminating the need for vertical delineation below this depth. The CPT analysis results are presented as Figure 3 in Appendix A. On March 1, 2012, five (5) new groundwater monitoring wells (MW-1, MW-2, MW-3, MW4, and MW-5) were installed in the vicinity and surrounding the past sampling location SAV-7. A truck-mounted drill rig outfitted with hollow stem augers was utilized to advance the borings to total depth.

3.1.1 Hydrogeology

During drilling operations saturated soil conditions were encountered at a depth of approximately 13 feet. The lithology of the borings was generally comprised of sandy clays, with a clay layer encountered at approximately 15 feet below grade.

3.1.2 Well Construction

Each of the monitoring wells was drilled to a total depth of fifteen (15) feet BG and installed in general accordance with ASTM D 5092 – 04 "Standard Practice for Design and Installation of Groundwater Monitoring Wells". The well assembly was installed with a screen interval of ten (10) feet, beginning at 4.5 feet and ending at 14.5 feet (BG). The new wells were constructed of 2-inch diameter, Schedule 40 PVC, with a 0.010-inch slotted PVC screen (10 feet in length) affixed to the PVC endpoints. Filter sand was placed from the total depth to approximately 2-feet above the top of the screen. Bentonite chips were placed above the filter sand and hydrated with fresh water in order to seal the borehole. Flush-mount, traffic-rated covers were affixed to secure the well at the ground surface. Well construction details for each of the monitoring wells are attached in Appendix D.

3.2 Soil Sampling

Five (5) soil borings were advanced in the vicinity of past sampling location SAV-7 (see Appendix A, Figure 2) in order to determine the horizontal and vertical extent of subsurface contamination. Soil samples were collected from each of the borings and screened with a MiniRae^{TM} 2000 OVA (Organic Vapor Analyzer) during drilling activities. The sample exhibiting the highest OVA reading was placed into preserved laboratory glassware. Each sample was logged to document soil lithology, color, moisture content, and sensory evidence of impairment. The "syringe method" for low-level volatile organic analysis was used for soil sample collection. Sample intervals for each boring are presented with the soil sample analytical results (Table 1) and are also provided on the lithologic boring logs included in Appendix D.

The bottled samples were then placed on ice in an insulated cooler and logged on the chain of custody. The cooler was then sealed for shipment to an independent laboratory for analysis for Trichloroethene, Vinyl Chloride, Cis-1,2-dichloroethene, and Trans-1,2-dichloroethene. Laboratory results are summarized in Table 1 included in Appendix B. The executed chain-of-custody form and laboratory data sheets are provided in Appendix C.

3.3 Groundwater Sampling

On March 2, 2012, Terracon re-mobilized to the subject site for the purpose of groundwater sampling. Groundwater samples were collected from each of the five (5) newly installed monitoring wells utilizing a low-flow peristaltic pump in accordance with sampling procedures described in the current EPA Region 4 SESD *Groundwater Sampling Operating Procedure* document (*SESDPROC-301-R1*; effective November 1, 2007). New tubing, connections, and gloves were used at each sample location. Prior to sample collection, the groundwater was monitored in the field for specific conductance, pH and temperature using an YSI 556 Multiparameter Meter, and turbidity using a Hach® 2100Q Turbidimeter. Once three consecutive stable readings were recorded for each of the parameters, a groundwater sample

was collected. All samples were placed in laboratory supplied containers, logged on a chain of custody form, and placed on ice in an insulated cooler at the time of sampling. After completing the sample collection activities, the sample coolers were submitted directly to the analytical laboratory for analysis for Trichloroethene, Vinyl Chloride, Cis-1,2-dichloroethene, and Trans-1,2-dichloroethene. Laboratory results are summarized in Table 2, included in Appendix B. The executed chain-of-custody form and laboratory data sheets are provided in Appendix C.

4.0 DATA EVALUATION

4.1 Soil Laboratory Analytical Results

Initial screening of the soil samples collected from soil borings at MW-1, MW-2, MW-3, MW-4, and MW-5 was conducted using an OVA to measure volatile concentrations in the soil samples. OVA readings indicated the presence of VOCs in each of the borings, aside from MW-2, ranging from 0 ppm to 9.4 ppm (parts per million). The OVA measurements are shown on the boring logs found in Appendix D. The soil sample that exhibited the highest OVA measurement from each soil boring was submitted for laboratory analysis.

Laboratory analysis of the soil sample submitted from MW-1 contained a cis-1,2-Dichloroethene concentration of 902 µg/kg. This concentration was found to be in excess of the Georgia EPD Hazardous Site Recovery Act (HSRA) Appendix I Notifiable Conditions limit of 530 µg/kg. No other constituents were detected above the laboratory method reporting limits.

Laboratory analysis of the soil sample submitted from MW-2 did not exhibit concentrations above the laboratory method reporting limits for each of the constituents of concern.

Laboratory analysis of the soil sample submitted from MW-3 contained a Vinyl chloride concentration of 5.60 µg/kg, a cis-1,2-Dichloroethene concentration of 17.6 µg/kg, and a Trichloroethene concentration of 8.40 µg/kg. Each of the these concentrations were found to be below the Georgia EPD HSRA Appendix I Notifiable Conditions limits.

Laboratory analysis of the soil sample submitted from MW-4 contained a cis-1,2-Dichloroethene concentration of 664 µg/kg. This concentration was found to be in excess of the Georgia EPD HSRA Appendix I Notifiable Conditions limit of 530 µg/kg. No other constituents were detected above the laboratory method reporting limits.

Laboratory analysis of the soil sample submitted from MW-5 contained a Vinyl chloride concentration of 31.4 µg/kg, a cis-1,2-Dichloroethene concentration of 134 µg/kg, and a Trichloroethene concentration of 139 µg/kg. The concentration of Trichloroethene was found to be in excess of the Georgia EPD HSRA Appendix I Notifiable Conditions limit of 130 µg/kg.

Trans-1,2-Dichloroethene was not detected above the laboratory method reporting limit in each of the soil samples submitted for analysis.

The test results are presented in Table 1, Appendix B and the laboratory results are included in Appendix C.

4.2 Groundwater Laboratory Analytical Results

The constituents detected in the groundwater sample from MW-1 included: Vinyl chloride (121 µg/l), cis-1,2-Dichloroethene (919 µg/l), and Trichloroethene (210 µg/l). Each of these concentrations was found to be in excess of the preliminary Type 3 RRS / Georgia EPD HSRA Appendix III Table 1: Groundwater Criteria limits.

Cis-1,2-Dichloroethene and Trichloroethene were detected above the laboratory method reporting limits in the groundwater sample from MW-2. These concentrations were found to be below the preliminary Type 3 RRS / Georgia EPD HSRA Appendix III Table 1: Groundwater Criteria limits.

The constituents detected in the groundwater sample from MW-3 included: Vinyl chloride (176 µg/l), cis-1,2-Dichloroethene (873 µg/l), and Trichloroethene (214 µg/l). Each of these concentrations was found to be in excess of the preliminary Type 3 RRS / Georgia EPD HSRA Appendix III Table 1: Groundwater Criteria limits.

The constituents detected in the groundwater sample from MW-4 included: Vinyl chloride (312 µg/l), cis-1,2-Dichloroethene (1,700 µg/l), and Trichloroethene (438 µg/l). Each of these concentrations was found to be in excess of the preliminary Type 3 RRS / Georgia EPD HSRA Appendix III Table 1: Groundwater Criteria limits.

The constituents detected in the groundwater sample from MW-5 included: Vinyl chloride (66.2 µg/l), cis-1,2-Dichloroethene (474 µg/l), and Trichloroethene (162 µg/l). Each of these concentrations was found to be in excess of the preliminary Type 3 RRS / Georgia EPD HSRA Appendix III Table 1: Groundwater Criteria limits.

The test results are presented in Table 2, Appendix B and the laboratory results are included in Appendix C.

5.0 FINDINGS AND RECOMMENDATIONS

Based on the above noted soil and groundwater analytical test results, the groundwater at the site has been impacted over a large area (i.e. not isolated to SAV-7 location). The soil impacts appear to be limited, based on the past and current test results of the samples collected. The vertical extent of groundwater contamination appears to be limited to 15 feet beneath the

existing ground surface based on the clay material encountered at 15 feet BG. It does not appear possible to perform soil/source removal and/or limited groundwater remediation and bring the site into compliance. Additional sampling will be required to fully determine the extent of contamination.

As noted in Terracon's report dated February 6, 2012, EPD has notified Coastal Concrete that a Compliance Status Report (CSR) needs to be completed and submitted for EPD approval. To complete the CSR additional soil and groundwater investigation will need to be completed along with the preparation of the traditional CSR report document. It is Terracon's opinion that anticipated costs for this remaining work will be on the order of $20,000.00 to $30,000.00. Once the CSR has been completed and EPD has reviewed the document additional work could be required by EPD and review comments will need to be addressed in order to complete a Corrective Action Plan. These additional costs could be on the order of $10,000.00 to $15,000.00. If remediation is required, chlorinated VOC plumes have been on the order of $100,000.00 to $1,000,000.00 in groundwater remediation and reporting costs.

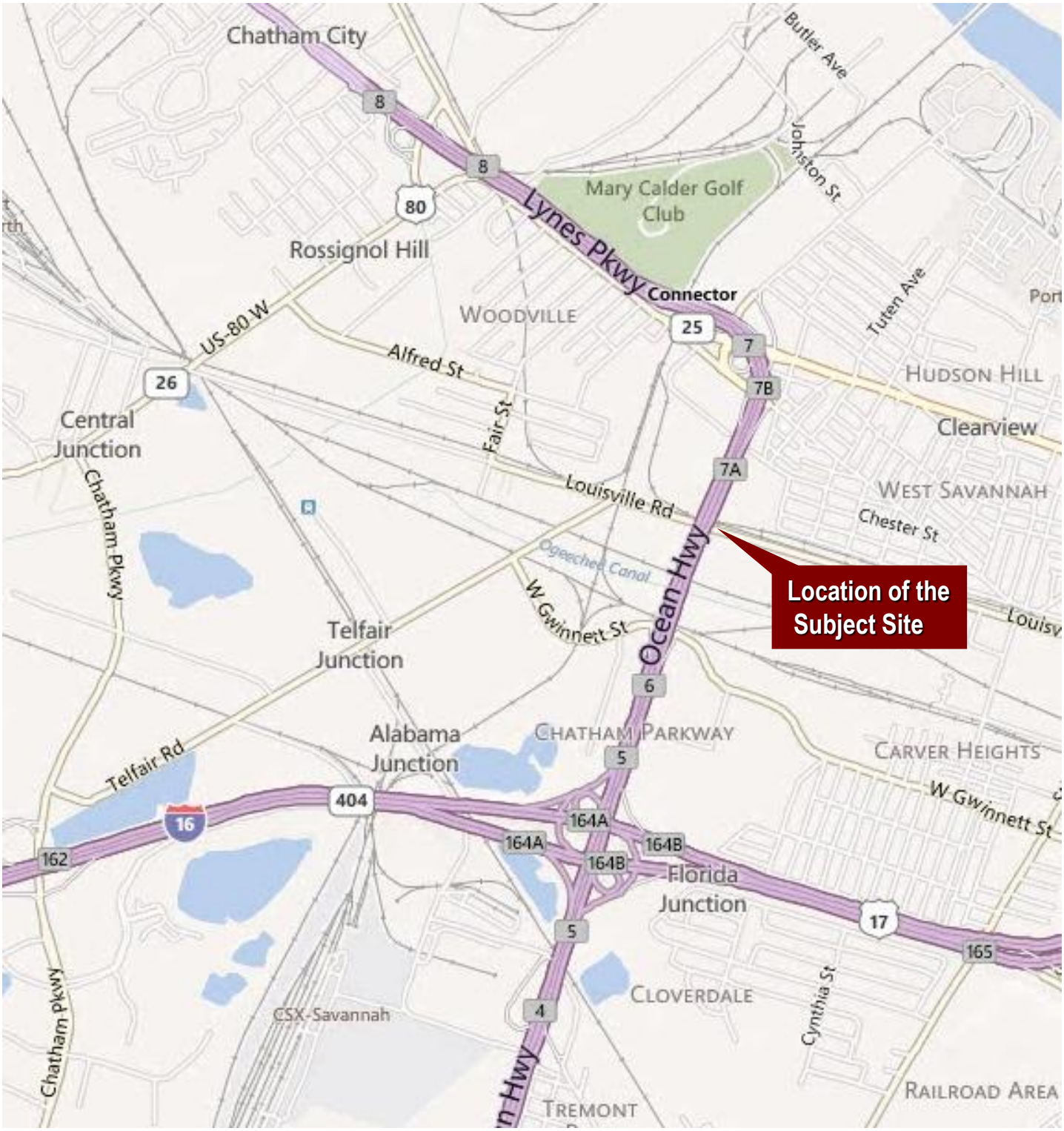
The property could enter into the Georgia Voluntary Remediation Program Act subject to Georgia EPD's approval. Under Section 12-8-106 of the Act: "A participant in the voluntary remediation program must meet the following criteria: (1) Be the property owner of the voluntary remediation property or have express permission to enter another's property to perform corrective action including, to the extent applicable, implementing controls for the site pursuant to written lease, license, order, or indenture; (2) Not be in violation of any order, judgment, statute, rule, or regulation subject to the enforcement authority of the director; and (3) Meet other such criteria as may be established by the board pursuant to Code Section 12-8-103".

A voluntary investigation and remediation plan (VIRP) must be prepared under the Georgia Voluntary Remediation Act. To complete this document additional soil and groundwater investigation and reporting will be required to document the full extent of contamination and to present a remediation plan for the site. In Terracon's opinion the costs for this work will be approximately $20,000.00 to $30,000.00. Once the EPD has reviewed the VIRP, EPD could require additional investigation and reporting. In addition to these costs the participant must also pay a nonrefundable application fee of $5,000.00 to be submitted with the above noted VIRP document. Under this VIRP remediation by natural attenuation could be selected as the remediation technology. This will require EPD approval and proof that natural attenuation is occurring. Semi-annual/annual sampling and reporting and a final CSR report will be required under the Voluntary Remediation Act program. Costs for the semi-annual sampling and reporting will be on the order of $10,000.00/year however this cost is dependent on the requirements of EPD.

The VIRP with EPD's review and approval could require site limitations, groundwater use restrictions, restrictions in the type of future development, long term monitoring of the subsurface conditions, etc. on the subject property and abutting properties if it is determined that the abutting properties have been impacted.

APPENDIX A

Figures



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GENERAL VICINITY MAP

2333 Louisville Road

Savannah, Chatham County, Georgia

Date: 03/22/2012	Scale: None	Figure:
Terracon Project No. ES127009		1

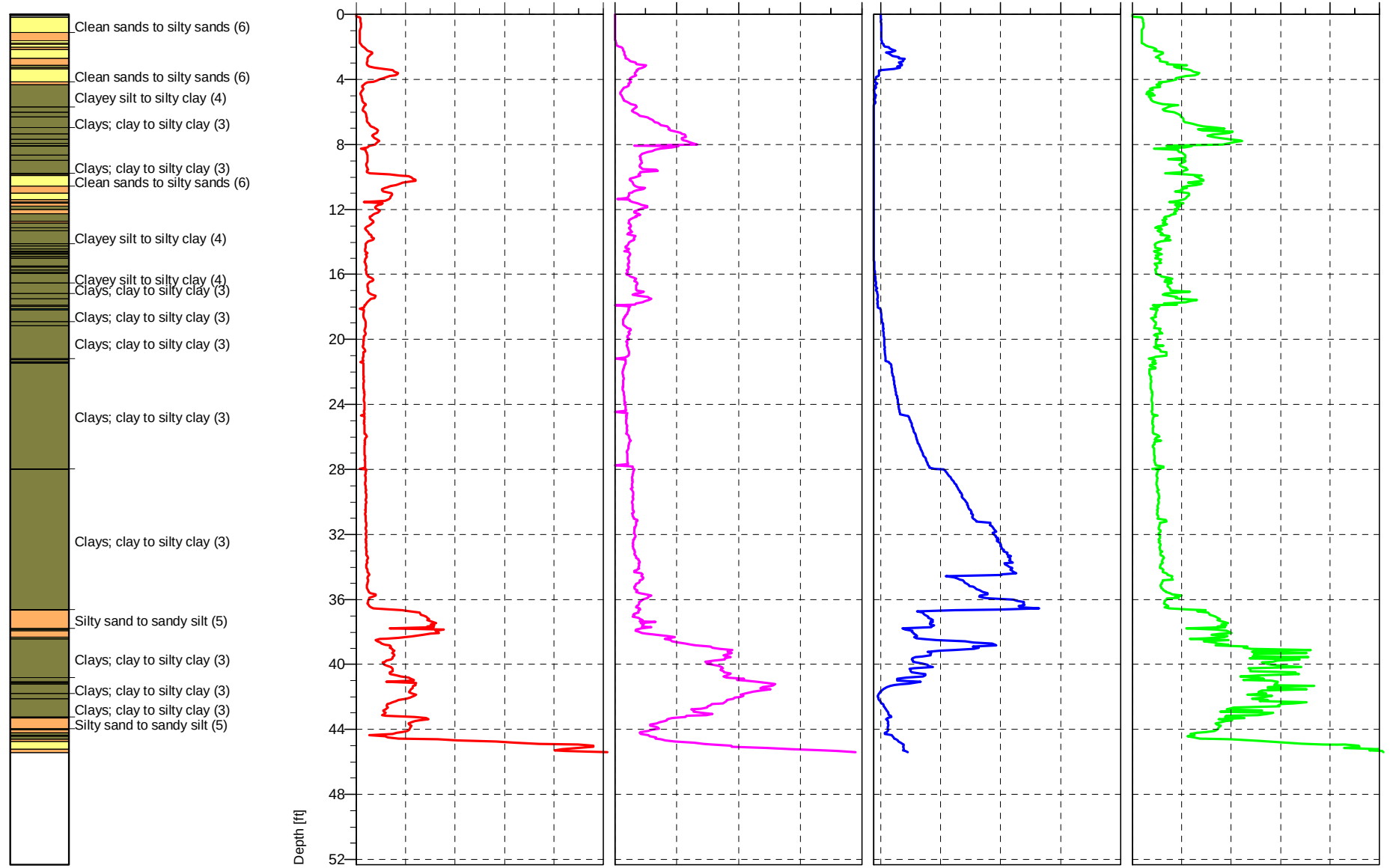
Terracon

SITE PLAN

2333 Louisville Road

Savannah, Chatham County, Georgia

Date: 03/22/2012	Scale: As Shown	Figure: 2
Terracon Project No. ES127009		



U2

Terracon

Cone No: 0
Tip area [cm2]: 10
Sleeve area [cm2]: 150

Location: Savannah, Georgia	Position: X: 0.00 m, Y: 0.00 m	Ground level: 0.00	Test no: C1
Project ID: EN127009	Client:	Date: 3/5/2012	Scale: 1 : 110
Project: 2333 Louisville Road		Page: 1/1	Fig: 3
		File: C1.cpd	

APPENDIX B
Data Tables

Limited Phase II Site Investigation
2333 Louisville Road
Savannah, Chatham County, Georgia
Terracon Project No. ES127009

Table 1: Soil Quality Summary

Analyte	Sample Identification					
	MW-1 #4 (12'-13' bgs) (µg/kg)	**MW-2 #4 (11'-12' bgs) (µg/kg)**	**MW-3 #4 (7'-8' bgs) (µg/kg)**	**MW-4 #5 (12'-13' bgs) (µg/kg)**	**MW-5 #5 (15' bgs) (µg/kg)**	**GA EPD HSRA Limit (µg/kg)[A]**
Sample Date	3/1/2012	3/1/2012	3/1/2012	3/1/2012	3/1/2012	
Vinyl chloride	BRL	BRL	5.60	BRL	31.4	40
trans-1,2-Dichloroethene	BRL	BRL	BRL	BRL	BRL	530
cis-1,2-Dichloroethene	**902**	BRL	17.6	**664**	134	530
Trichloroethene	BRL	BRL	8.40	BRL	**139**	130

N/A - Not Applicable
BRL - Below Reporting Limits
[A] - Regulatory Limits - Georgia EPD Hazardous Site Recovery Act (HSRA) Appendix I Notifiable Conditions
BOLD - Detected concentration exceeds the applicable regulatory limit

Limited Phase II Site Investigation
2333 Louisville Road
Savannah, Chatham County, Georgia
Terracon Project No. ES127009

Table 2: Groundwater Quality Summary

Analyte	Sample Identification						Preliminary Type 3 RRS / GA EPD HSRA Limit (µg/L)[A]
	MW-1 (µg/L)	MW-2 (µg/L)	MW-3 (µg/L)	MW-4 (µg/L)	MW-5 (µg/L)	SAV-7 (µg/L)	
Sample Date	3/2/2012	3/2/2012	3/2/2012	3/2/2012	3/2/2012	1/2007	
Vinyl chloride	**121**	BRL	**176**	**312**	**66.2**	**32**	2
trans-1,2-Dichloroethene	BRL	BRL	BRL	BRL	BRL	8.9	100
cis-1,2-Dichloroethene	**919**	4.43	**873**	**1,700**	**474**	**190**	70
Trichloroethene	**210**	4.39	**214.0**	**438.0**	**162**	**210**	5

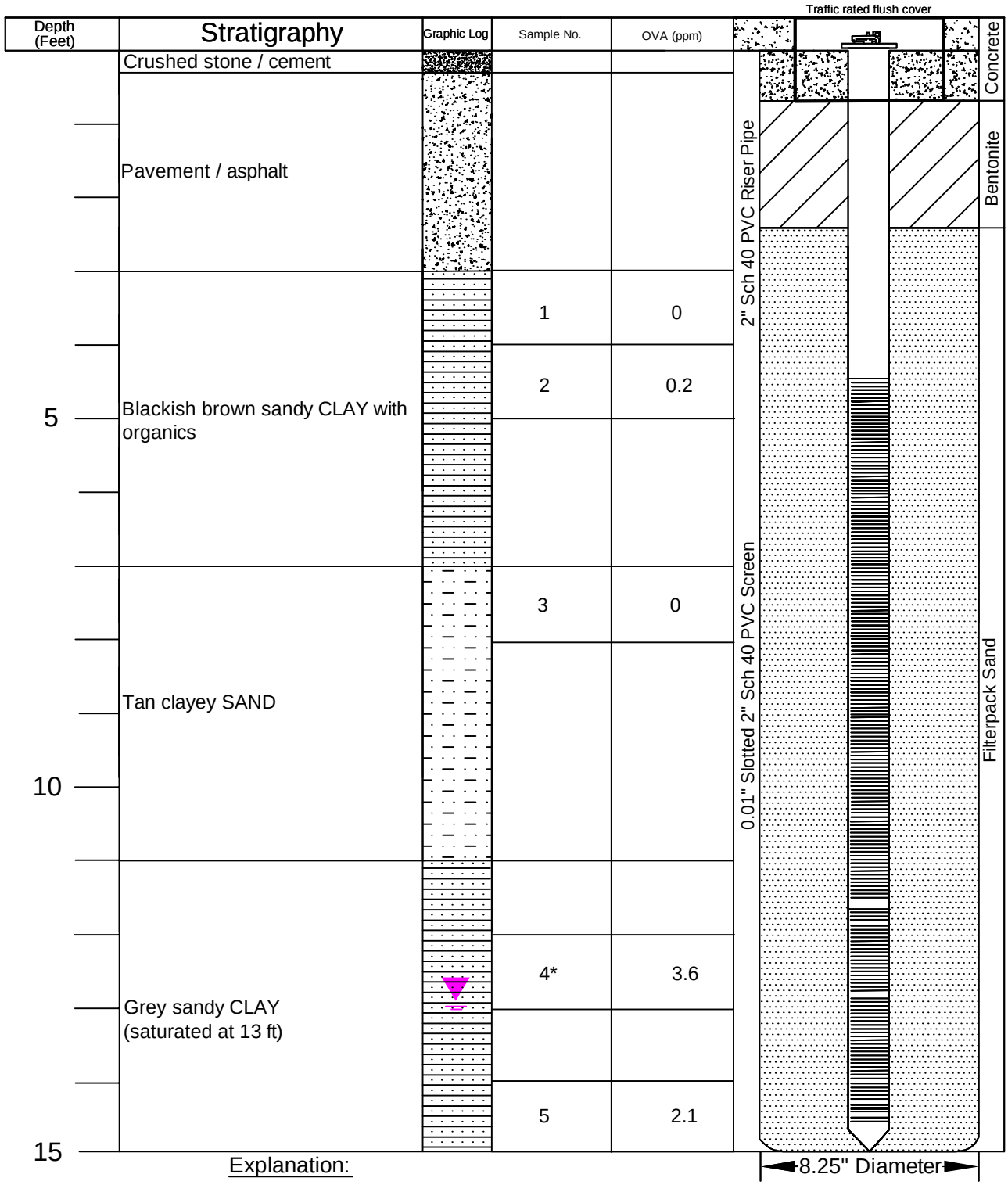
N/A - Not Applicable
BRL - Below Reporting Limits
[A] - Regulatory Limits - Georgia EPD Hazardous Site Recovery Act (HSRA) Appendix III Table 1: Groundwater Criteria
BOLD - Detected concentration exceeds the applicable regulatory limit

APPENDIX C
Laboratory Analytical Data

APPENDIX D

Soil Boring Logs / Monitoring Well Details

PROJECT NAME: 2333 Louisville Road	TERRACON PROJECT NUMBER: ES127009		BORING LOG AND WELL CONSTRUCTION DETAIL OF MW-1
PROJECT LOCATION: Savannah, Chatham County, Georgia			
DATE DRILLED: March 1, 2012		LOGGED BY: J. Caldwell	
DRILLING RIG: D-50		DRILLER: A. Brown	
WATER LEVEL: 4.02' Below TOC - March 2, 2012		GROUND WATER ELEVATION: Not Applicable	



Explanation:

Saturated Zone at Time of Boring * - Sample No. Submitted for Laboratory Analysis

SAND | sandy CLAY | silty CLAY

CLAY | SILT | woody DEBRIS

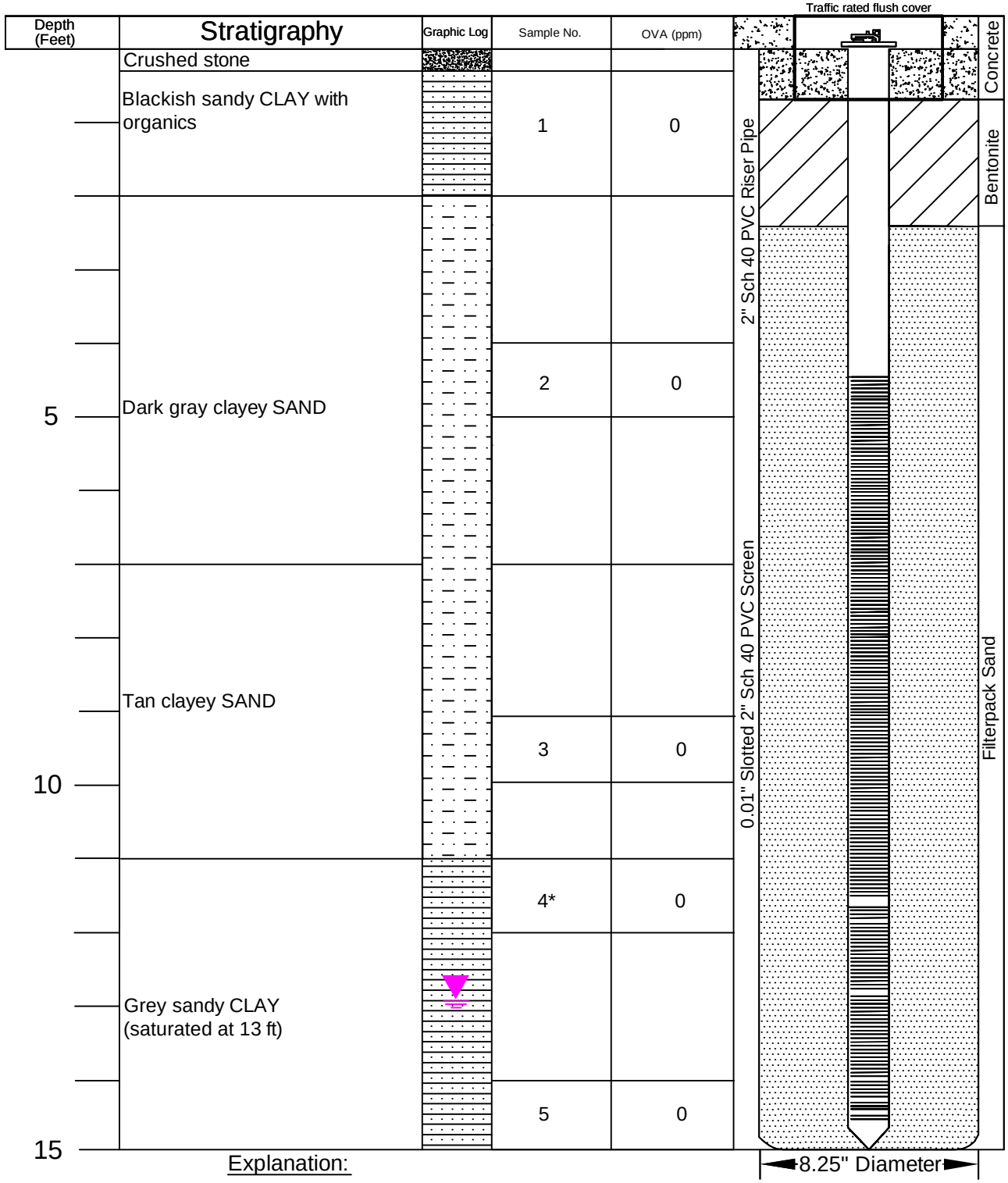
siltv SAND | clayey SAND

Terracon
Consulting Engineers and Scientists
2201 Rowland Avenue Savannah, Georgia 31404
Phone: 912.629.4000 Fax: 912.629.4001

PROJECT NAME: 2333 Louisville Road	TERRACON PROJECT NUMBER: ES127009
PROJECT LOCATION: Savannah, Chatham County, Georgia	
DATE DRILLED: March 1, 2012	LOGGED BY: J. Caldwell
DRILLING RIG: D-50	DRILLER: A. Brown
WATER LEVEL: 3.79' Below TOC - March 2, 2012	GROUND WATER ELEVATION: Not Applicable

BORING LOG AND WELL CONSTRUCTION DETAIL OF

MW-2



Explanation:

Saturated Zone at Time of Boring * - Sample No. Submitted for Laboratory Analysis

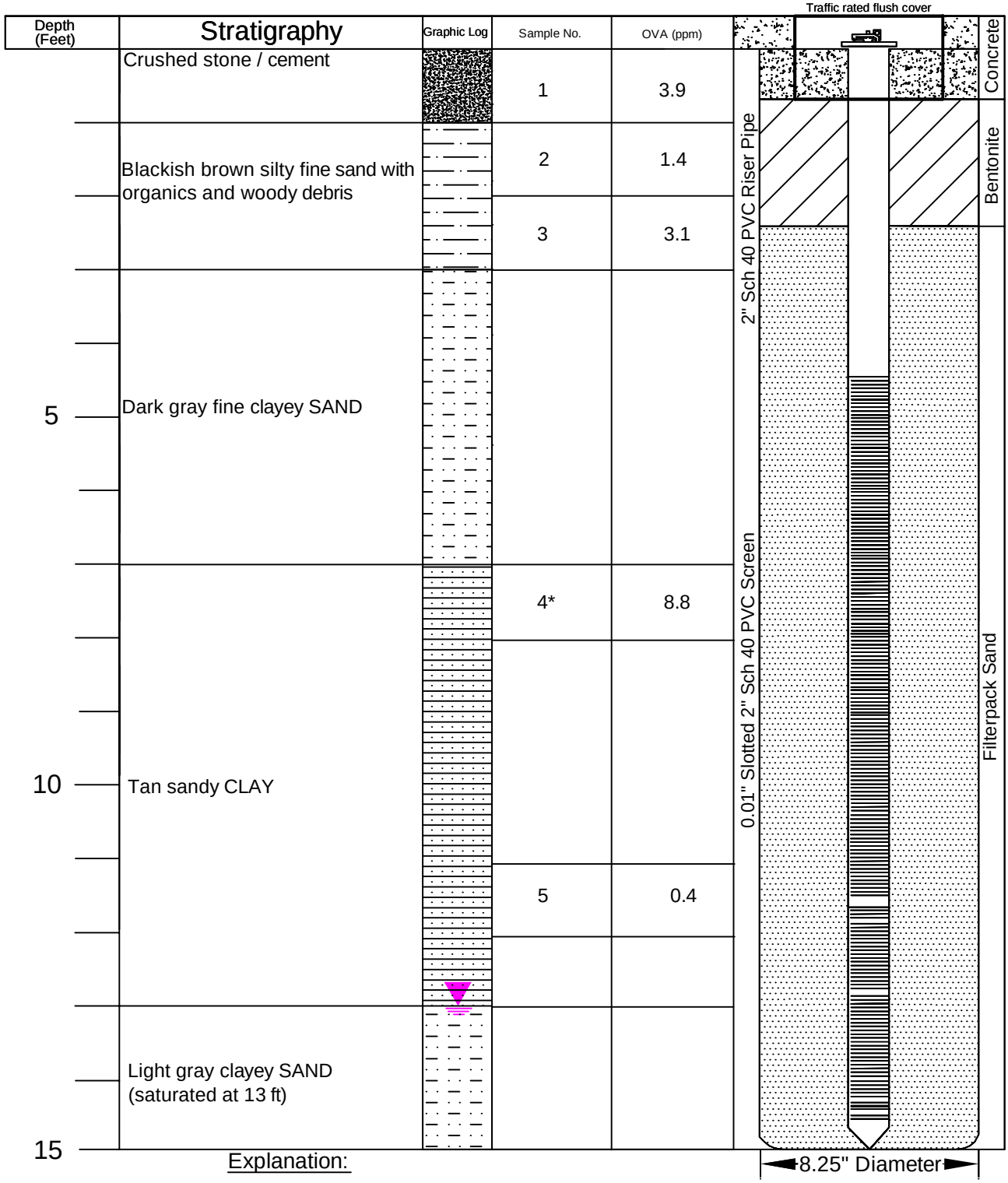
SAND, sandy CLAY, silty CLAY, CLAY, SILT, woody DEBRIS, silty SAND, clayey SAND

Terracon
Consulting Engineers and Scientists
2201 Rowland Avenue Savannah, Georgia 31404
Phone: 912.629.4000 Fax: 912.629.4001

PROJECT NAME: 2333 Louisville Road	TERRACON PROJECT NUMBER: ES127009
PROJECT LOCATION: Savannah, Chatham County, Georgia	
DATE DRILLED: March 1, 2012	LOGGED BY: J. Caldwell
DRILLING RIG: D-50	DRILLER: A. Brown
WATER LEVEL: 3.46' Below TOC - March 2, 2012	GROUND WATER ELEVATION: Not Applicable

BORING LOG AND WELL CONSTRUCTION DETAIL OF

MW-3



Explanation:

Saturated Zone at Time of Boring * - Sample No. Submitted for Laboratory Analysis

SAND, sandy CLAY, silty CLAY, CLAY, SILT, woody DEBRIS, silty SAND, clayey SAND

Terracon
Consulting Engineers and Scientists
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Phone: 912.629.4000 Fax: 912.629.4001

PROJECT NAME: 2333 Louisville Road

TERRACON PROJECT NUMBER: ES127009

PROJECT LOCATION: Savannah, Chatham County, Georgia

DATE DRILLED: March 1, 2012

LOGGED BY: J. Caldwell

DRILLING RIG: D-50

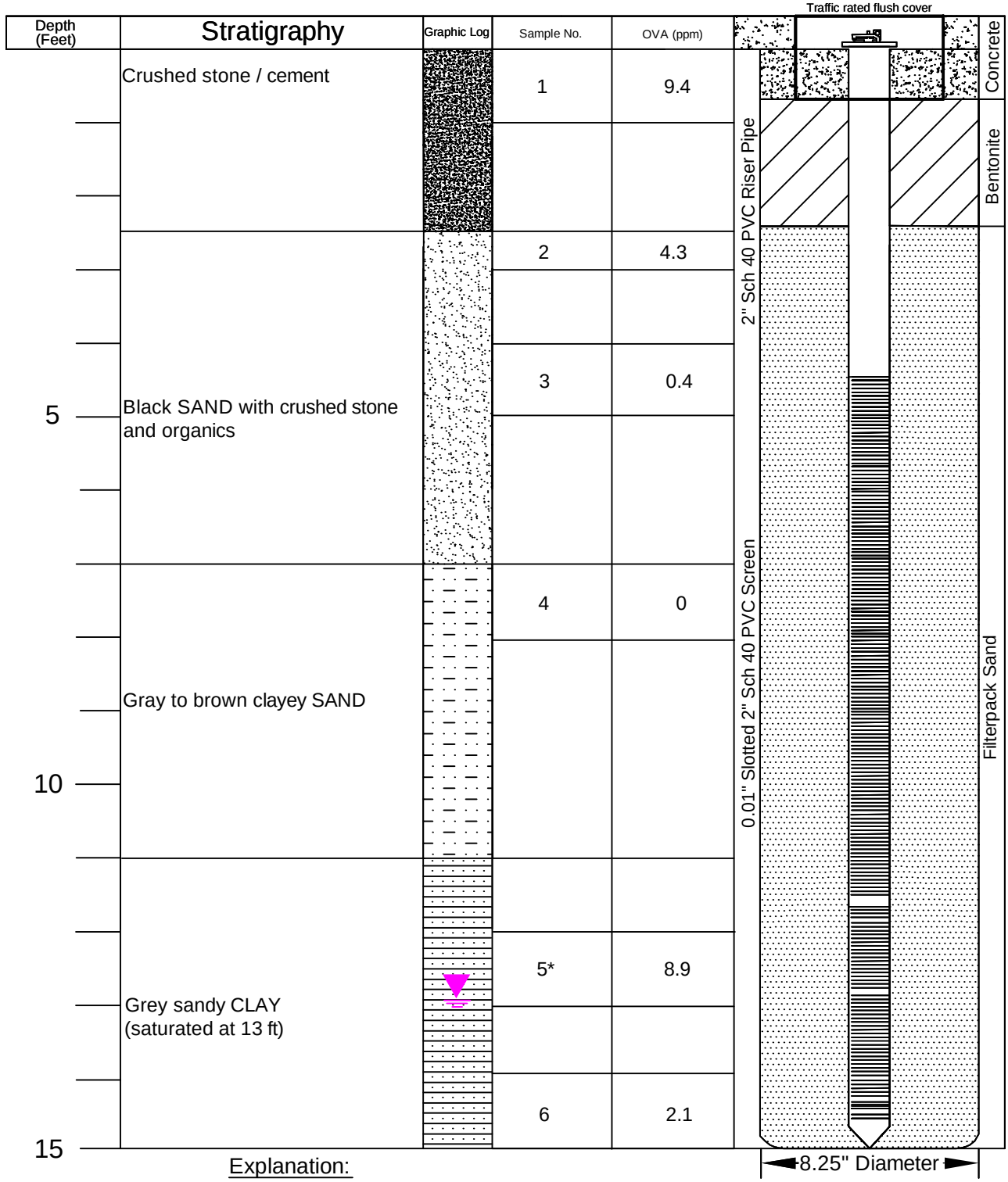
DRILLER: A. Brown

WATER LEVEL: 5.37' Below TOC - March 2, 2012

GROUND WATER ELEVATION: Not Applicable

BORING LOG AND WELL CONSTRUCTION DETAIL OF

MW-4



Explanation:

Saturated Zone at Time of Boring

* - Sample No. Submitted for Laboratory Analysis

SAND, sandy CLAY, silty CLAY, CLAY, SILT, woody DEBRIS, silty SAND, clayey SAND

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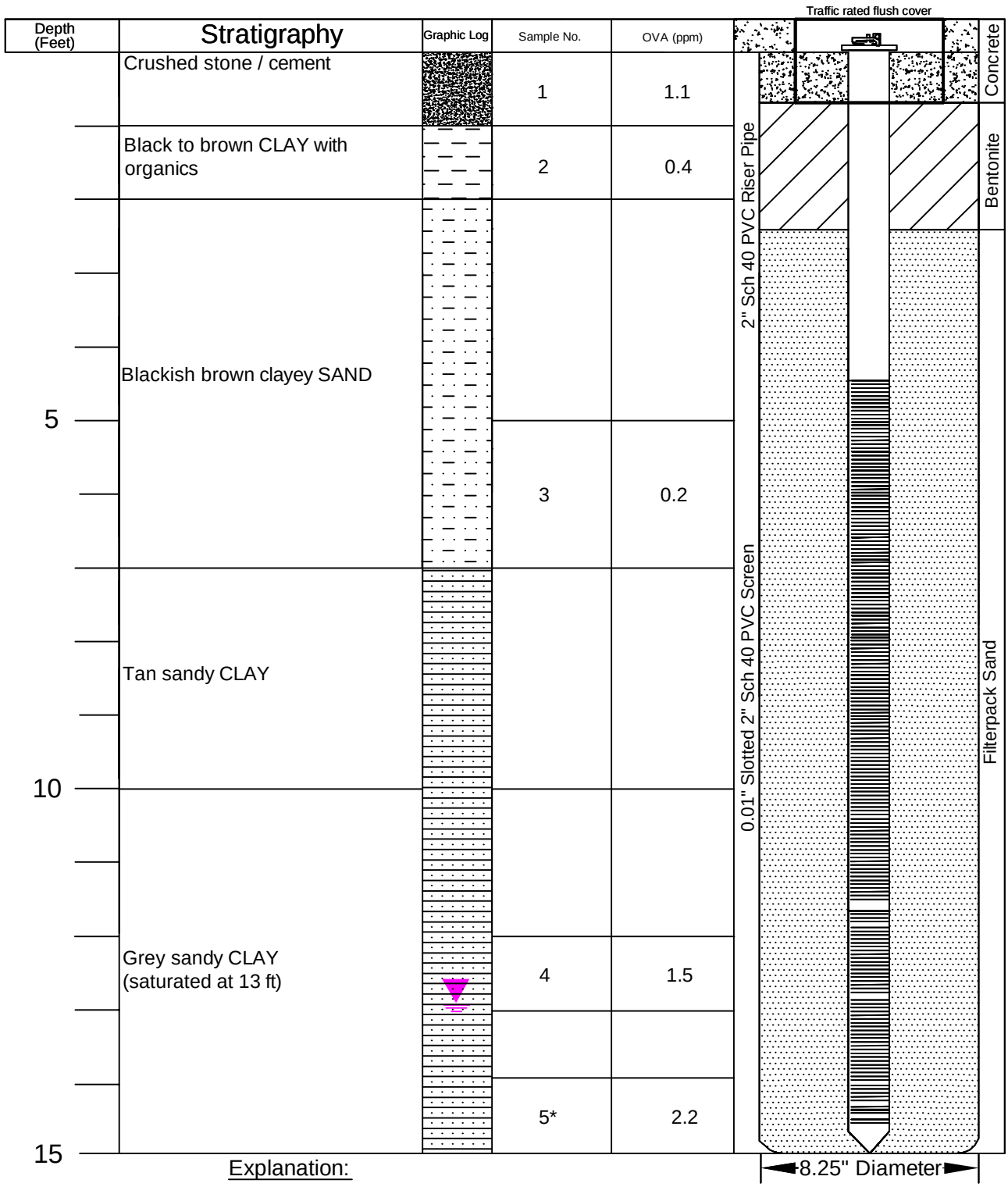
PROJECT NAME: 2333 Louisville Road	TERRACON PROJECT NUMBER: ES127009	BORING LOG AND WELL CONSTRUCTION DETAIL OF MW-5
PROJECT LOCATION: Savannah, Chatham County, Georgia		
DATE DRILLED: March 1, 2012	LOGGED BY: J. Caldwell	
DRILLING RIG: D-50	DRILLER: A. Brown	
WATER LEVEL: 3.28' Below TOC - March 2, 2012	GROUND WATER ELEVATION: Not Applicable	



Explanation:

Saturated Zone at Time of Boring * - Sample No. Submitted for Laboratory Analysis

SAND | sandy CLAY | silty CLAY

CLAY | SILT | woody DEBRIS

silty SAND | clayey SAND

Terracon
Consulting Engineers and Scientists
2201 Rowland Avenue Savannah, Georgia 31404
Phone: 912.629.4000 Fax: 912.629.4001

APPENDIX E

MILESTONE SCHEDULE

Task	Task Name	Start	Finish	Duration
1	Submit VRP Application	1/2/2018	1/3/2018	2d
2	Identification of Regulated COCs	1/3/2018	7/5/2018	26w 2d
3	Source Zone Profile / Slug Testing	1/3/2018	7/5/2018	26w 2d
4	Semi-Annual Progress Report # 1	1/3/2018	7/5/2018	26w 2d
5	On-Site Horizontal / Vertical Delineation	1/3/2018	1/2/2019	52w 1d
6	Semi-Annual Progress Report # 2	7/6/2018	1/2/2019	25w 4d
7	Semi-Annual Progress Report # 3	1/3/2019	7/5/2019	26w 2d
8	Off-Site Horizontal / Vertical Delineation	1/3/2019	1/2/2020	52w 1d
9	Semi-Annual Progress Report # 4	7/5/2019	1/2/2020	26w
10	Updated CSM with Final Remediation Plan	1/3/2020	7/3/2020	26w 1d
11	Semi-Annual Groundwater Monitoring Event # 1	1/3/2020	7/3/2020	26w 1d
12	Semi-Annual Progress Report # 5	1/3/2020	7/3/2020	26w 1d
13	Semi-Annual Groundwater Monitoring Event # 2	7/6/2020	1/4/2021	26w 1d
14	Semi-Annual Progress Report # 6	7/6/2020	1/4/2021	26w 1d
15	Semi-Annual Groundwater Monitoring Event # 3	1/4/2021	7/1/2021	25w 4d
16	Semi-Annual Progress Report # 7	1/4/2021	7/1/2021	25w 4d
17	Semi-Annual Groundwater Monitoring Event # 4	7/2/2021	1/3/2022	26w 2d
18	Semi-Annual Progress Report # 8	7/2/2021	1/3/2022	26w 2d
19	Semi-Annual Groundwater Monitoring Event # 5	1/4/2022	7/1/2022	25w 4d
20	Semi-Annual Progress Report # 9	1/4/2022	7/1/2022	25w 4d
21	Semi-Annual Groundwater Monitoring Event # 6	7/5/2022	12/30/2022	25w 4d
22	VRP Compliance Status Report	7/5/2022	12/30/2022	25w 4d