GEORGIA
DEPARTMENT OF NATURAL RESOURCES
ENVIRONMENTAL PROTECTION DIVISION

Jeffrey W. Cown, Director

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April 22, 2024

The Brunswick T-Street Landfill Steering Group:

The City of Brunswick
c/o Mr. Garrow Alberson
601 Gloucester Street
Brunswick, Georgia 31520

Ashland Inc. (for Hercules Incorporated)
c/o Mr. Timothy Hassett
500 Hercules Road
Wilmington, Delaware 19894

Georgia-Pacific, LLC
c/o Ms. Shannon Perez
133 Peachtree St.
Atlanta, Georgia 30303

Subject: Revised Monitoring and Maintenance Plan
T-Street Dump (HSI #10317)
Tax Parcel ID: 01-00180
Brunswick, Glynn County, Georgia

Dear Mr. Alberson, Mr. Hassett, and Ms. Perez:

The Georgia Environmental Protection Division (EPD) has reviewed the revised Monitoring and Maintenance Plan (MMP) that was submitted on February 19, 2024 by Wood/WSP USA Environment & Infrastructure, Inc. Our review has found the revised MMP has addressed all of the comments from EPD's letter dated November 30, 2023. Therefore, the MMP is hereby approved.

The approved MMP will be incorporated by reference into the Uniform Environmental Covenant (UEC) that is being prepared for this property. That UEC and the MMP, along with the requirements and deadlines within this letter, will also be incorporated into Orders EPD-HSR-238 and EPD-HSR-239 (the Orders) in accordance with Condition 12 of the Orders.

As a reminder, EPD has requested that you submit a draft UEC for approval based on comments that were submitted by email on November 30, 2023. EPD has not yet received the draft document.

Please note that EPD has received the first Annual Monitoring and Maintenance Report dated April 17, 2024 and will provide comments in a separate letter. If you have any questions, please contact Bill Williams at 470-524-4725.

Sincerely,

David Brownlee
Unit Coordinator
Response and Remediation Program

c: Beth Willis-Stevenson, EPD Coastal District (via email)
Philip Marcum, Wood/WSP (via email)
File: 216-0071 (HSI#10317)

Monitoring and Maintenance Plan

T Street Landfill Site
Brunswick, Glynn County, Georgia

Prepared for:

T Street Landfill Group:
Georgia-Pacific, LLC
Hercules LLC
City of Brunswick

Prepared by:
Wood Environment & Infrastructure Solutions, Inc.
2677 Buford Highway NE
Atlanta, Georgia 30324

28 February 2022 (Revised 19 February 2024)

Wood Project No. 6123191266

Wood Environment & Infrastructure Solutions, Inc.
2677 Buford Hwy NE
Atlanta, Georgia 30324
T: 404-873-4761
www.woodplc.com

28 February 2022 (Revised 19 February 2024)

Subject: Monitoring and Maintenance Plan
T Street Landfill Site
Brunswick, Glynn County, Georgia
Wood Project No. 6123191266

To Whom It May Concern:

The following Monitoring and Maintenance Plan describes the obligations of the property manager and/or the property owner for the monitoring and maintenance of engineered controls at the T Street Landfill Site. This document will be available for public review upon request to the City of Brunswick, Georgia. Any comments or questions should be directed to Georgia-Pacific, LLC at 404-652-3916.

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1.0 INTRODUCTION

The property subject to this Monitoring and Maintenance Plan (M&M Plan) is the approximately 45-acre T Street Landfill Site, located immediately south of the T Street roadbed and west of Newcastle Street in Brunswick, Glynn County, Georgia. The T Street Landfill Site (the "Site") is situated within Tax Parcel 01-00180 as shown on Figure 1 in Appendix A.

This M&M Plan has been prepared on behalf of the T Street Landfill Steering Group that includes Georgia-Pacific, LLC (G-P), Hercules LLC (Hercules), and the City of Brunswick, Georgia. The purpose of M&M Plan is to establish routine continuing care of the engineered controls installed at the property and a program of annual groundwater monitoring.

In addition, a Uniform Environmental Covenant (UEC) that references an M&M Plan has been recorded as an institutional control as required to meet the approved Type 5 RRS remedy in accordance with EPD requirements. The UEC prohibits the use of the Site for residential purposes and prohibits the use of groundwater for drinking water. The UEC also prevents activities on the Site that may interfere with the Type 5 remedy.

2.0 BACKGROUND

The former T Street Landfill Site is bordered to the immediate east, south and west by marshlands of the Turtle and East Rivers and Academy Creek. The T Street roadbed is the only upland feature physically connected to the Site.

Landfill operations occurred between 1961 and the mid-1970s. In July 1994, the T Street Landfill site was listed on Georgia's Hazardous Site Inventory (HSI) as HSI No. 10317, a Class II site requiring further investigation and corrective action. Investigation findings were reported to the Georgia Environmental Protection Division (EPD) in a Revised Compliance Status Report dated June 2006.

A Corrective Action Plan (CAP) that included engineering and institutional controls to bring the Site into compliance with Type 5 risk reduction standards (RRS) was submitted to the Georgia EPD in March 2011. The CAP was modified in July 2013 and approved by the Georgia EPD on June 5, 2015. Engineering controls included consolidation of debris within the landfill and from the immediately surrounding marsh, construction of a suitable landfill cover and access control to the Site via the T Street entrance. Institutional controls included establishment of an UEC restricting use of the Site, and implementation of an M&M Plan.

Implementation of the engineering controls was completed by October 2021 and resulted in the submittal of a Compliance Status Report (CSR) dated February 28, 2022. The CSR presented a Draft UEC and this M&M Plan.

An initial M&M Plan, dated December 2015, was prepared by TRC Environmental Corporation (TRC) and was approved with comments by the EPD in a letter dated February 27, 2018. This M&M Plan has been modified to reflect EPD's comments and the current conditions at the Site that were remediated to comply with the approved Type 5 RRS.

3.0 LANDFILL INSPECTION

In accordance with the EPD-approved Corrective Action Plan, the landfill will be inspected on an annual basis during the post-closure period. The following items will be included in these inspections:

- Visual site examination to identify the presence of depressions, general or localized subsidence, gullies, or evidence of ponded water.
- Visual site examination to identify the presence of holes, burrows, or other disturbances of the landfill cover by animals or possible site trespassers.
- Visual site examination to confirm the adequacy of prior maintenance activities (i.e., have previously prescribed nonconformities/repairs been successful and properly implemented?).
- Visual site examination to determine if there is a lack of suitable vegetative cover resulting from either natural or manmade causes.
- Visual site examination to determine if there are areas of erosion of the landfill cover materials.
- Visual site examination to confirm that the condition of the toe of the landfill cover, the wooded buffer zone, and the perimeter access road are all functional and in suitable condition.
- Visual site examination to confirm the condition of security fencing and access gates.
- Visual site examination to confirm the condition and legibility of signage and permanent markers.

Inspection activities relating to the existing site groundwater monitoring system are addressed in Section 5.

During site inspections, the landfill cover and protective vegetative surface will be observed and assessed by traversing the landfill and examining its condition. An inspection log entry will be prepared after each inspection visit. This inspection entry will be suitable for inclusion in annual reports provided to the Georgia EPD and will include the following information:

- Date of visit.
- Name, affiliation, and contact information of the inspector.
- Person responsible for preparing the inspection report.
- Weather conditions at the time of inspection visit.
- Any items of note, including a suitable description, location on plan or sketch map, measurements taken, site photographs, and recommendations for further response action.
- Record of contacts made during the visit.
- Notes and comments regarding the overall adequacy of site maintenance status.

- General conclusions regarding the observed condition of the landfill cover materials, the vegetative surface cover and site access controls.
- A written summary of site-specific recommendations.

It is the expectation of this M&M Plan that all non-compliant items identified during an inspection will be promptly responded to and corrected. A record of site repairs or improvements will also be included on the inspection log sheet. A copy of the Site Inspection form is provided in Appendix B.

4.0 LANDFILL MAINTENANCE

Ongoing maintenance of the Site will be conducted on a regular and routine basis. Such routine maintenance activities include periodic mowing of the vegetative cover, removal of deep-rooted, invasive plants, and ongoing response to surficial deficiencies noted during inspection events. A Site log will be kept to document ongoing maintenance activities and copies of this log will be included in annual reports (see Section 7).

Maintenance activities will generally consist of the following:

1. **Maintain the integrity and effectiveness of the final landfill cover.** This could include regrading of the landfill surface to correct the effects of settlement, subsidence, erosion, etc. Repairs or maintenance might also be necessary to respond to and prevent run-on/run-off of storm water from eroding or otherwise damaging the final cover. The final cover will be maintained as set forth in the EPD-approved landfill closure plans and specifications and protected by suitable shallow-rooted vegetative growth. Low areas observed in the cover that show evidence of storm water accumulation (due to settling, subsidence etc.) will be filled in and restored to design grade.
2. **Maintain the effectiveness of the vegetative cover.** This activity could include replanting, trimming/mowing, fertilizing, etc., as needed to sustain the vegetative cover, minimize the effects of erosion, and minimize damage to the vegetative surface by storm water run-on or run-off.
3. **Maintain landfill perimeter access road.** The perimeter access road will be maintained to facilitate ongoing site inspections and other necessary maintenance activities. Pot holes, ruts, etc., will be repaired using suitable materials that are consistent with the design plans and project specifications.
4. **Maintain access controls.** This activity would include the ongoing maintenance and repair of security fencing and access gates at the entrance to the closed landfill area. Maintenance will generally consist of addressing deficiencies observed during routine inspections.

The above maintenance activities will be implemented during the 30-year post-closure period. Site inspections will be generally conducted on an annual basis to ensure that the landfill closure is fully protective of the environment and consistent with the approved Type 5 RRS. In the event of a severe weather event or other unexpected site contingency, additional site inspection events may be required. The underlying principle behind this M&M Plan is to ensure that the landfill closure is sustained and corrective actions are identified and implemented in a timely manner.

Maintenance activities relating to the site groundwater monitoring system are addressed in Section 5.

5.0 GROUNDWATER MONITORING PROGRAM

The 2022 CSR certified compliance with Type 3 and/or Type 4 RRS for groundwater at T Street Landfill Site, except for a slight exceedance of heptachlor epoxide in upgradient monitoring well MW-11. However, post-closure groundwater monitoring events have been prescribed by Georgia EPD. The following sections of the M&M Plan have been prepared to describe the various methods and procedures of post-closure groundwater monitoring that will be conducted in accordance with Georgia EPD solid waste management regulation 391-3-4-.14 (12).

5.1 GROUNDWATER MONITORING SYSTEM

A network of groundwater monitoring wells were installed as part of the Compliance Status Investigations in 2000, 2001, 2014 and 2015. These monitoring wells were installed in accordance with Georgia EPD's Hazardous Site Response regulations (391-3-19).

A total of eighteen (18) monitoring wells have been installed at the T Street Landfill Site. Fourteen of the wells (MW-1 through MW-14) were installed to monitor the quality of groundwater in the uppermost aquifer along the boundary of the former landfill. Additionally, two wells (MW-6D and MW-9D) were installed to provide vertical delineation within the uppermost aquifer. Two of the wells (MW-15 and MW-16) are located in a background area that is not directly upgradient of the landfill.

The following table summarizes well construction details.

Monitoring Well Details

WELLID	POSITION RELATIVE TO LANDFILL	MEASURING [(1)] POINT ELEVATION	GROUND SURFACE ELEVATION	WELL SCREEN INTERVAL
MW-1	Upgradient	12.28	9.30	2.7 – 12.7
MW-2	Downgradient	8.07	5.02	2.3 – 12.3
MW-3	Downgradient	6.81	3.98	2.2 – 12.2
MW-4	Downgradient	7.20	4.38	2.2 – 12.2
MW-5	Downgradient	7.47	4.68	2.5 – 12.5
MW-6R	Downgradient	7.52	4.89	3.0 – 13.0
MW-6D	Downgradient Vertical Well	7.54	4.02	24.0 – 34.0
MW-7	Downgradient	7.75	4.97	2.2 – 12.2
MW-8	Downgradient	7.64	4.81	2.2 – 12.2
MW-9	Downgradient	7.44	4.53	2.2 – 12.2
MW-9D	Downgradient Vertical Well	6.45	4.29	24.0 – 34.0
MW-10	Upgradient	10.58	7.52	2.2 – 12.2

WELLID	POSITION RELATIVE TO LANDFILL	MEASURING [(1)] POINT ELEVATION	GROUND SURFACE ELEVATION	WELL SCREEN INTERVAL
MW-11	Upgradient	11.13	8.13	2.2 – 12.2
MW-12	Upgradient	10.64	7.54	2.2 – 12.2
MW-13	Upgradient	9.06	6.19	2.2 – 12.2
MW-14	Upgradient	10.31	7.11	1.8 – 11.8

Elevations are measured in feet above mean sea level (msl). Depths are measured in feet below ground surface (bgs).

(1) Elevation of the top of PVC well casing.

Using this existing groundwater monitoring network, periodic sampling events will be conducted. All sixteen monitoring wells, if intact, will be sampled to assess and establish the current groundwater quality both upgradient and downgradient of the closed landfill area. In the event one or more of the sixteen wells is no longer viable for sampling, the well will be eliminated from the current sampling event. The efficacy of installing a replacement well or wells will be determined as discussed in Section 5.3.1. Figure 2 – Monitoring Well Locations illustrates the locations of the sixteen existing monitoring wells with respect to the T Street Landfill Site and the historical direction of groundwater flow. Well construction diagrams for these sixteen monitoring wells are provided in Appendix C.

5.2 MONITORING PROGRAM

As set forth in the EPD-approved CAP, this M&M Plan anticipates additional rounds of groundwater monitoring at the T Street Landfill Site to assess and evaluate current and future water quality. The first groundwater monitoring event under this M&M Plan will be performed on a schedule such that groundwater monitoring documentation will be included in the first Annual Inspection and Certification Report to be submitted to EPD by April 30, 2024. Groundwater monitoring events will be conducted on an annual basis thereafter.

In the event that the first groundwater monitoring event confirms there are no exceedances of residential Type 1 or Type 2 RRS for the Appendix I organic and inorganic constituents in groundwater, then the T Street Landfill Steering Group may propose for EPD's approval a reduced number of sampling locations for the next event. Groundwater monitoring events will continue for a minimum of three annual events, after which a demonstration of compliance may be submitted to EPD for review. Otherwise, since the UEC prohibits use of groundwater for drinking, groundwater monitoring events will continue until such time as compliance with non-residential Type 3 or Type 4 RRS in groundwater can be confirmed and documented.

At the appropriate time, a formal written request to EPD will be submitted recommending cessation of long-term groundwater monitoring activities.

The groundwater monitoring program will include the sixteen monitoring wells described in Section 5.1, which will be monitored annually for the constituents included in Appendix I of the

Georgia Solid Waste Regulations (391-3-4-.14 (22)) plus toxaphene as requested by EPD and the additional constituents previously detected above Type 3 RRS. The analytical parameters for the Appendix I constituents are listed in the following tables for inorganic constituents and organic constituents for these analytical evaluations.

Appendix I Inorganic Constituents

Antimony	Chromium	Selenium
Arsenic	Cobalt	Silver
Barium	Copper	Thallium
Beryllium	Lead	Vanadium
Cadmium	Nickel	Zinc

Appendix I Organic Constituents

Acetone	Trans-1,4-Dichloro-2-butene	4-Methyl-2-pentanone
Acrylonitrile	1,1-Dichlorethane	Phenanthrene
Anthracene	1,2-Dichlorethane	Styrene
Benzene	1,1-Dichloroethylene	1,1,1,2-Tetrachloroethane
Bromochloromethane	cis-1,2-dichloroethene	1,1,2,2-Tetrachloroethane
Bromodichloromethane	trans-1,2-Dichloroethene	Tetrachloroethylene
Bromoform	1,2-Dichloropropane	Toluene
Carbon Disulfide	cis-1,3-Dichloropropane	1,1,1-Trichloroethane
Carbon Tetrachloride	trans-1,3-Dichloropropane	1,1,2-Trichloroethane
Chlorobenzene	Ethylbenzene	Trichloroethylene
Chloroethane	2-Hexanone	Trichlorofluoromethane
Chloroform	Heptachlor epoxide^	1,2,3-Trichloropropane
4,4-DDT	Methyl Bromide	Vinyl Acetate
Dibromochloromethane	Methyl Chloride	Vinyl Chloride
1,2-Dibromo-3-chloropropane (DBCP)	Methylene Bromide	Xylenes
Ethylene Dibromide (EDB)	Methylene Chloride	Toxaphene*
1,2-Dichlorobenzene	2-Butanone	
1,4-Dichlorobenzene	Iodomethane	

* Requested by EPD

^Previously detected above Type 3 & Type 4 RRS

5.3 SAMPLING AND ANALYSIS PROCEDURES

The following factors and procedures shall be considered and/or implemented in planning and

conducting groundwater sampling and analysis operations. These factors and procedures must be considered in light of the site-specific objectives and the overall scope and intent of the monitoring activities:

- Safety of sampling personnel
- Mandatory safety briefings
- Selection and appropriate preparation of sampling equipment
- Selection of parameters to be measured and evaluation of sample fractions to be analyzed
- Required sample volumes
- Selection and proper preparation of sample containers
- Sample preservation
- Sample holding times
- Sample handling
- Special precautions for trace contaminant sampling
- Sample identification
- Collection of auxiliary data
- Transportation and shipping of samples
- QA and QC
- Sample chain-of-custody

Specific procedures for collecting groundwater samples and subsequent analytical activities to establish water quality will be conducted in accordance with established and accepted procedures that are described in this M&M Plan. Sampling events will follow the operating procedures recommended by the US EPA Region 4 Science and Ecosystem Support Division in groundwater sampling document SESDPROC-301-R4, effective April 26, 2017. Proper sampling techniques are important to assure that groundwater samples are representative of site conditions and that the samples have not been inadvertently compromised or cross-contaminated by the field sampling procedures.

The following summary of sampling activities and procedures required to obtain representative groundwater samples are arranged in the order in which they will be performed in the field. The equipment and sampling methods will vary depending on the type of monitoring wells,depth to groundwater, and the requirements and specifications of the Georgia-certified laboratory selected to conduct the testing.

5.3.1 Monitoring Well Inspections

Prior to sample collection, each monitoring well will be visually inspected to evaluate whether there are conditions or circumstances that could potentially affect the integrity of the monitoring well and the validity of analytical results of samples collected from the well. The inspection results will be recorded on a copy of the well inspection form provided in Appendix D. Laboratory-quality nitrile gloves will be worn throughout the sampling process and changed between each monitoring well location.

During each groundwater sampling event, monitoring wells will be individually inspected to confirm that they are secure (locked) and there is no visual evidence of damage. A written or electronic well inspection form will be completed during each sampling event for each well. The well inspection form will document the condition of the well protective casing, lock, cap, well pad, interior well casing, and surrounding areas of the groundwater monitoring well, etc. Deficiencies observed during the sampling event, along with documentation of modifications or repairs completed, will be noted on the well inspection form.

In the event that a well component has or does become damaged or require maintenance, replacement of the monitoring well within the vicinity of the damaged well will be considered in light of available data and Georgia EPD will be contacted. If it is determined to replace the well, effort will be made to install the replacement well on a schedule that will make it available for monitoring during the next scheduled sampling event.

5.3.2 Water Level And Well Depth Measurements

Water level (*i.e.*, depth to water) measurements will be collected to determine the water table elevation or potentiometric head in site monitoring wells and to estimate the water table configuration at the site. The depth of well measurement is used to calculate the volume of standing water in the well and to determine if the well is obstructed. These measurements will be performed before any water is removed from a well. The water level indicator will be decontaminated prior to its first use and between subsequent wells by rinsing with deionized, organic-free water.

Groundwater level measurements are made in reference to an established reference point on the well casing. Reference points at the site are tied in with the North American Datum (NAD 83) Georgia East Coordinates. Groundwater level measurements will be made and recorded to the nearest 0.01 foot. The calculated elevations will be reported to the nearest 0.01 foot.

An electric water level indicator will be used for water level measurements. As a contingency method for determining the depth to water (i.e., if electric water level indicator malfunctions), a steel tape with chalk may be used. Both devices are calibrated in 0.01 feet. The total depth of each well will be measured by lowering the measuring device to the bottom of the well. A comparison of the total depth of the well with previous measurements will be noted to determine if excessive siltation has occurred in the well casing.

5.3.3 Well Purging

Each monitoring well will be purged before a sample is collected. Purging a well is important because ground water that has remained in a well casing for an extended period of time is likely not representative of the water present in the surrounding aquifer formation that the well is intended to monitor. Groundwater sampling will be conducted utilizing US EPA Region 4 protocol (SESDPROC-301-R4, April 26, 2017) for low stress (low-flow) purging and sampling. Utilizing this approach, the pump intake is placed within the screened interval of the well, and the well is pumped slowly, keeping the drawdown to a minimum until the water quality field parameters have stabilized. This sampling method reduces turbidity and the potential for inadvertently incorporating suspended sediment into the sample.

The following summary provides more detail regarding the water quality field parameters and their appropriate methodology:

PARAMETER	US EPA METHOD
• pH (standard units)	SM4500 H + B or equivalent
• Specific conductivity (µmhos/cm)	SM2510B or equivalent
• Temperature (Celsius)	SM2550B or equivalent
• Turbidity (NTU)	US EPA 180.1 or equivalent

Wells may be purged using Teflon tubing and either a peristaltic pump or stainless-steel submersible sampling pump. Purging and sampling of the monitoring wells with a bailer should be avoided. The pump will be started at a low flow rate (100 – 500 ml/min) and the outflow will be directed into a graduated bucket of known volume. Water levels within the well will be measured and recorded during purging. The total volume of water purged from the well prior to sampling will be measured and recorded.

The color, odor, turbidity, and any other comments pertaining to the purge water will be documented on a copy of the well monitoring form included in Appendix E. Water quality parameters will be measured and recorded on. Once the readings have stabilized, sample collection may begin.

5.3.4 Well Sampling

Groundwater samples will be collected upon completion of the purging step. If the field technicians have used a submersible or peristaltic pump for low-flow purging, it is important that the sampling team maintain the same low-flow rate for sample collection. Disconnect the pump tubing from the flow-through cell, so that samples can be collected directly from the discharge port of the pump tubing prior to passing through the flow- through cell. This is an essential requirement of the sample collection effort.

For any wells that are purged dry prior to stabilization of field parameters, groundwater samples will be collected only if the well recovers within 8 hours of the purging activity that caused it to go dry. In the event a monitoring well does not recover within this 8-hour time frame, the well will be declared dry and no sample will be collected during the sampling event.

Section 391-3-4-.14(13) of the Georgia Groundwater and Corrective Action Rule specifies that samples should not be field-filtered prior to laboratory analysis. If elevated turbidity levels are observed and a determination is made to submit filtered groundwater samples for metals analyses, then both filtered and unfiltered samples will need to be collected and submitted to the laboratory for analysis. Sample containers for the Appendix I analyses will be filled directly from the sampling device. The following table provides a list of appropriate sample containers and preservatives for the samples.

Sample Containers and Preservatives

PARAMETER	CONTAINER TYPE AND VOLUME	SAMPLE PRESERVATIVE
Total Metals		
Barium Beryllium Chromium Cobalt Copper Lead Nickel Silver Vanadium Zinc	500 mL plastic or glass	Nitric acid (HNO3) (pH<2)
Antimony Arsenic Cadmium Selenium Thallium	500 mL plastic or glass	HNO3 (pH<2)
Organics		
Volatiles	40 mL glass vials (3)	Hydrochloric Acid (HCL) (pH<2)
EDB	40 mL glass vials (2)	Sodium Thiosulfate (Na2S2O3) (pH<2)
DBCP	40 mL glass vials (2)	(Na2S2O3) (pH<2)
Polynuclear Aromatic Hydrocarbons		
PAHs	40 mL amber glass vials (2)	Unpreserved
Pesticides		
Toxaphene 4,4-DDT Heptachlor Epoxide	1 L amber glass (2)	Unpreserved

5.4 SAMPLE MANAGEMENT AND ANALYSIS

This section describes the manner in which samples are managed once they are collected andthe analytical methods to be used.

5.4.1 Sample Preservation And Shipment

Sample containers, preservation methods, and holding times that meet US EPA standards will be used. To prevent contamination, new laboratory-supplied containers will be used for all samples. For samples that require preservation, preservatives will be placed in the containers by the analytical laboratory before sample collection. Aqueous samples requiring preservation will be checked immediately upon arrival at the laboratory for adequate pH adjustment. Additional preservative will be added by the laboratory, if required.

Samples will be collected in the appropriate container and the sample container will be filled completely to minimize head space. Care must be taken not to overrun the bottles containing preservatives. All sample containers will be placed on ice immediately after collection. Sample containers will be shipped to the off-site laboratory using an overnight delivery service or by hand delivery.

Field conditions such as vehicle or generator exhaust or the presence of dusty conditions must be noted, and the appropriate field QC blanks collected or sampling suspended until conditions improve.

Glass bottles will be placed in bubble wrap to help prevent breakage.

For delivery of all samples to the laboratory, the following will be done:

1. Collect and preserve the samples as outlined in this section. Properly label each container with indelible, waterproof ink.
2. Place sample containers in laboratory shipping container(s). Samples will be packed securely with packing material (*e.g.,* bubble wrap) to protect sample containers from accidental breakage during shipment.
3. Chill samples with ice or frozen chemical ice packs placed around the containers.
4. Complete the chain-of-custody forms.
5. Tape chain-of-custody form to the inside of the shipping container lid.
6. Seal shipping container with tape. Place custody seal on container if it is being shipped by common carrier.
7. Deliver or ship to the off-site laboratory. Fastest available shipping methods will be used whenever required by short holding times or project schedules.

Responsibility for proper use of containers and preservatives is the duty of the sampling personnel and the project laboratory coordinator. For specific container types, volumes, and preservatives for analytical parameters of this monitoring program refer to the table included in Section 5.4.3.

5.4.2 Chain-Of-Custody Control

Sample possession must be traceable from the time of collection to ultimate disposal through the use of chain-of-custody procedures. Chain-of-custody forms must accompany all sample shipping containers in order to document the transfer of the shipping containers and samples from the field to the laboratory. Procedures to be implemented include the following:

- Prepare sample containers in the laboratory with pre-applied labels.
- Complete chain-of-custody form(s) in the field indicating sample identification, size and number of containers filled, sampling date, sampling time, sample collector, and sample preservative, if applicable. Note that sampling time and date are left blank for blind duplicate samples. The sampling location of blind duplicates is recorded in the field notes.
- Pack shipping containers with samples, field chain-of-custody forms, and ice or ice packs. Each set of sample containers to be shipped together in a single shipping container will be assigned a field chain-of-custody form, which will travel with the shipping container.
- Seal containers and ship them to a EPD certified laboratory. Common carriers or intermediate individuals shall be identified on the field chain-of-custody form, and copies of all bills-of-lading will be retained.
- In the laboratory, receive and check shipping containers for broken seals or damaged sample containers. If no problems are noted, samples will be logged into the laboratory, and the field chain-of-custody form will be completed. The person relinquishing the samples to the facility or agency should request the representative's signature acknowledging sample receipt. If the representative is unavailable or refuses, this is noted in the "Received By" space.
- Include copies of the field chain-of-custody form with the analytical data.

The chain-of-custody form will be filled out legibly in black or blue ink. Errors will be corrected by drawing a single line through the incorrect information and entering the correct information. All corrections will be initialed and dated by the person making the correction.

Completed chain-of-custody forms will be placed in a plastic bag, sealed, and taped to the inside cover of the shipping container. After the samples are iced, if required, the shipping container will be sealed, dated, and delivered by the sampling technician or shipped to the laboratory using an overnight delivery service. Samples will be received from the carrier and logged by the laboratory staff. In the event that samples are shipped for Saturday delivery, or delivered to the laboratory directly by the sampling technician after hours, arrangements will be made to have the appropriate personnel present to receive and log the samples upon their arrival or the samples will be stored in a secured location until the next business day. Sample shipping containers will not be left unattended.

A separate sample receipt will be prepared whenever samples are split with a government agency or other entity. The receipt will be marked to indicate with whom the samples are being split. The person relinquishing the samples to the agency should request the agency representative's signature acknowledging sample receipt. If the representative is unavailable or refuses, this will be noted on the receipt and in the field book.

Three copies of the chain-of-custody will be available with the field notes in the field. Two of the copies will accompany the samples to the laboratory. If a chain-of-custody form is damaged in shipment, the third (field copy) will be available. A written statement will be prepared by the person who collected the samples. The statement should include information contained in the field book/log entries regarding the sample.

5.4.3 Laboratory Analysis

All sample laboratory preparations and analyses will be performed by a laboratory certified in Georgia by the EPD. A summary of the groundwater laboratory analytical program, including the laboratory analyses, laboratory analytical methods, sample hold times, container types, container volumes, and sample preservatives, is presented in following table. For each analytical parameter that has a Maximum Contaminant Level (MCL) value under the Federal National Primary Drinking Water Regulations, the quantitative analytical detection limit will be at or below the corresponding MCL.

Analytical Requirements

PARAMETER	ANALYTICAL METHOD	SAMPLE HOLD TIME	CONTAINER TYPE AND VOLUME	SAMPLE PRESERVATIVE
Total Metals				
Barium Beryllium Chromium Cobalt Copper Lead Nickel Silver Vanadium Zinc	US EPA 6010	6 months	500 mL plastic or glass	Nitric acid (HNO3) (pH<2)
Antimony Arsenic Cadmium Selenium Thallium	US EPA 6020	6 months	500 mL plastic or glass	HNO3 (pH<2)
Organics				
Volatiles	US EPA 8260	14 days	40 mL glass vials (3)	Hydrochloric Acid (HCL) (pH<2)
EDB	US EPA 8011	14 days	40 mL glass vials (2)	Sodium Thiosulfate (Na2S2O3) (pH<2)
DBCP	US EPA 8011	14 days	40 mL glass vials (2)	(Na2S2O3) (pH<2)
Polynuclear Aromatic Hydrocarbons				
PAHs	US EPA 8270C	7 days	40 mL amber glass vials (2)	Unpreserved

PARAMETER	ANALYTICAL METHOD	SAMPLE HOLD TIME	CONTAINER TYPE AND VOLUME	SAMPLE PRESERVATIVE
Pesticides				
Toxaphene 4,4-DDT Heptachlor Epoxide	US EPA 8081B	7 days	1 L amber glass (2)	Unpreserved

5.5 QUALITY CONTROL PROCEDURES

This section describes the quality control procedures that will be used during implementation of the groundwater sampling event to ensure the quality of the samples and analytical results.

5.5.1 Quality Asurance And Quality Control

Groundwater sampling procedures are designed to provide a representative sample of groundwater for chemical analysis. Specific procedures for collecting groundwater samples to monitor water quality are outlined below and are based on established and accepted procedures. These methods have been developed over several years, and US EPA-approved procedures, such as US EPA Region 4 Field Branches Quality System and Technical Procedures, are used wherever applicable. Proper sampling techniques are necessary to provide representative samples that have not been altered or contaminated by the sampling procedure.

Several steps are taken in the field to assure sample QC. Some of these steps include the following:

- Decontaminating the water level tape and probe prior to using and between wells.
- Placing a plastic drop cloth at the well to protect the equipment from contact with soil around the well.
- Preparing a field blank sample consisting of organic-free water, which has been subjected to the same field methods as the samples.
- Field calibration of meters used for pH and conductivity.
- Sampling and analysis of a minimum of one duplicate sample per groundwater monitoring event.

Field QC samples are collected to assess the quality of the analytical data and to evaluate sampling and analytical reproducibility (precision). Field QC samples will consist of duplicate samples, field blanks, and rinsate blanks for QA/QC.

<u>Duplicate Samples</u>

Duplicate samples, prepared by splitting a single sample between two separate containers, are used to evaluate sampling and analytical reproducibility (precision). Field duplicates will be collected at a rate of approximately one duplicate for every 20 samples (or one per each full monitoring event). Points where duplicate samples are to be collected will be selected at random in the field. The samples will be submitted as blind duplicates to the laboratory.

Field and Rinsate Blanks

A field blank is a set of sample bottles that are filled with organic-free deionized water in the field. The deionized water is handled in the same manner as the sample. Field blanks contain the same preservatives as the samples.

A rinsate blank is a set of sample bottles that are filled with organic free deionized water that has come into contact with the field sampling equipment. Rinsate blanks are collected as necessary on sampling equipment that is non-dedicated or has been decontaminated in the field. Rinsate blanks are collected to ensure no cross contamination has occurred between the sample equipment and the sample collected.

Rinsate blanks will be collected and analyzed to assess procedural errors in sampling and equipment decontamination. Rinsate blanks will be collected at a rate of one per sampling event when non-dedicated sampling equipment, such as a submersible pump, is used. When dedicated or disposable sampling equipment is to be used (*i.e.*, only one sampling point where there is no likelihood of cross contamination), and field conditions do not compromise sample integrity (*e.g.*, wind-blown or dusty conditions), no field or rinsate blanks will be required.

5.5.2 Field Notes

Personnel who collect samples are responsible for recording pertinent information in field books or log sheets. This information includes data on the depth to water, total depth of well, color, turbidity, time of sampling, pH, conductivity, temperature, and other pertinent data. These notes are a valuable record of the conditions in the field and problems that might be encountered and are used in the data interpretation and analysis of the laboratory results. A well monitoring form for groundwater monitoring is included as Appendix E.

The pages in the field books or log sheets will be dated and signed or initialed by the person who is recording the information. Unused space at the bottom of a page will be crossed through. Work sketches or phrases that are recorded but deemed incorrect will be marked through in such a way as to still be legible, yet obviously struck from the text. A mark-through will be initialed and dated by the person striking the item.

5.5.3 Decontamination Procedures

Proper decontamination of sampling equipment is essential to prevent cross contamination of samples with the sampling device. All sampling equipment will be decontaminated before sampling and between each sample. The following decontamination procedure will be sufficient to meet project needs.

1. Clean with tap water and laboratory detergent using a brush if necessary to remove particulate matter and surface films.
2. Rinse thoroughly with tap water.
3. Rinse thoroughly with deionized water.
4. Rinse thoroughly with organic-free water and allow to air dry.

5. Wrap with aluminum foil and/or heat shrink plastic to prevent contamination if equipment is going to be stored or transported.

5.5.4 Waste Management Practices

Groundwater and other waste produced during the site monitoring and sampling activities will be handled as follows:

- **Liquids.** Purge water and liquids from the decontamination of sampling equipment will be containerized and characterized for off-site disposal.
- **Used personnel protection equipment (PPE), as appropriate.** All PPE, waste paper, and other wastes will be placed into general trash dumpsters for disposal.
- **Investigative Samples.** Groundwater samples analyzed by the laboratory will be disposed of by the laboratory in accordance with their standard operating procedures (SOPs).

5.6 DATA VALIDATION AND DATA MANAGEMENT

The laboratory is responsible for verifying that reported analytical results are correct. Laboratory data quality review will be performed by a data quality specialist using applicable USEPA Guidance Documents. Data qualifiers will be assigned as appropriate.

The data will be managed in a relational database. Data summary tables for inclusion in annual reports will be produced from the database.

6.0 SOIL GAS SAMPLING AND TESTING (METHANE)

Methane testing within the landfill area was conducted on January 3 and 4, 2022 following completion of construction of the landfill cover. An updated Soil Gas Sampling and Testing event will be performed during the period of the second Monitoring and Maintenance Report.

Soil methane testing will be conducted at the 22 locations sampled for the 2022 study. The latitude and longitude will be determined for each sample location in the field using a portable GPS receiver. Refer to Figure 3 in Appendix A for proposed sample locations.

A specialty contractor will be engaged to conduct the methane sampling. A soil vapor sampling implant will be installed at a depth of approximately 2 to 3 feet at each sampling location. The sampling implant will be bedded in sand. A seal of hydrated bentonite will be placed over the sand and allowed to set up for approximately 12 hours.

Following installation of the sampling implants, a soil vapor reading in percent methane will be collected from each sampling location using a calibrated multi-gas meter with an instrument quantitation limit of 0.1% methane. The soil vapor readings will be tabulated and depicted on a figure.

An ambient air reading for methane using the multi-gas meter will also be collected at each location at which methane concentration in soil gas is detected above the Lower Explosive Limit (LEL, 5% methane by volume).

A Soil Gas Sampling and Testing report will be included as an Appendix to the Second Annual Inspection and Certification Report due by April 30, 2025. The report will include an analysis of the updated soil gas results, including a determination if additional sampling or methane mitigation is warranted.

7.0 RECORDKEEPING AND REPORTING

An initial Inspection and Certification Report will be submitted by April 30, 2024 and annually thereafter to document the various inspections, maintenance, and monitoring activities that were conducted during the reporting period. The report will include copies of inspection and maintenance logs and summaries of the groundwater monitoring results. The attached appendices provide templates for the logs and the annual report.

Copies of documents associated with the post-closure care of the T Street Landfill Site will be submitted and maintained at the EPD-designated information repository and will be available for public review upon request to the City of Brunswick, Georgia.

Should the first three sampling events demonstrate compliance with Type 3 or Type 4 RRS in groundwater, a formal written request to EPD will be submitted recommending cessation of long-term groundwater monitoring activities.

APPENDIX A

FIGURES

N

Glynn County
Site Location

Site Location

Glynn Camp

Turtle River

East River

Brunswick

Back Landing

Legend

Restricted Use Zone (RUZ) boundary

T Street Landfill Site Boundary

Tax Parcel 01-00180

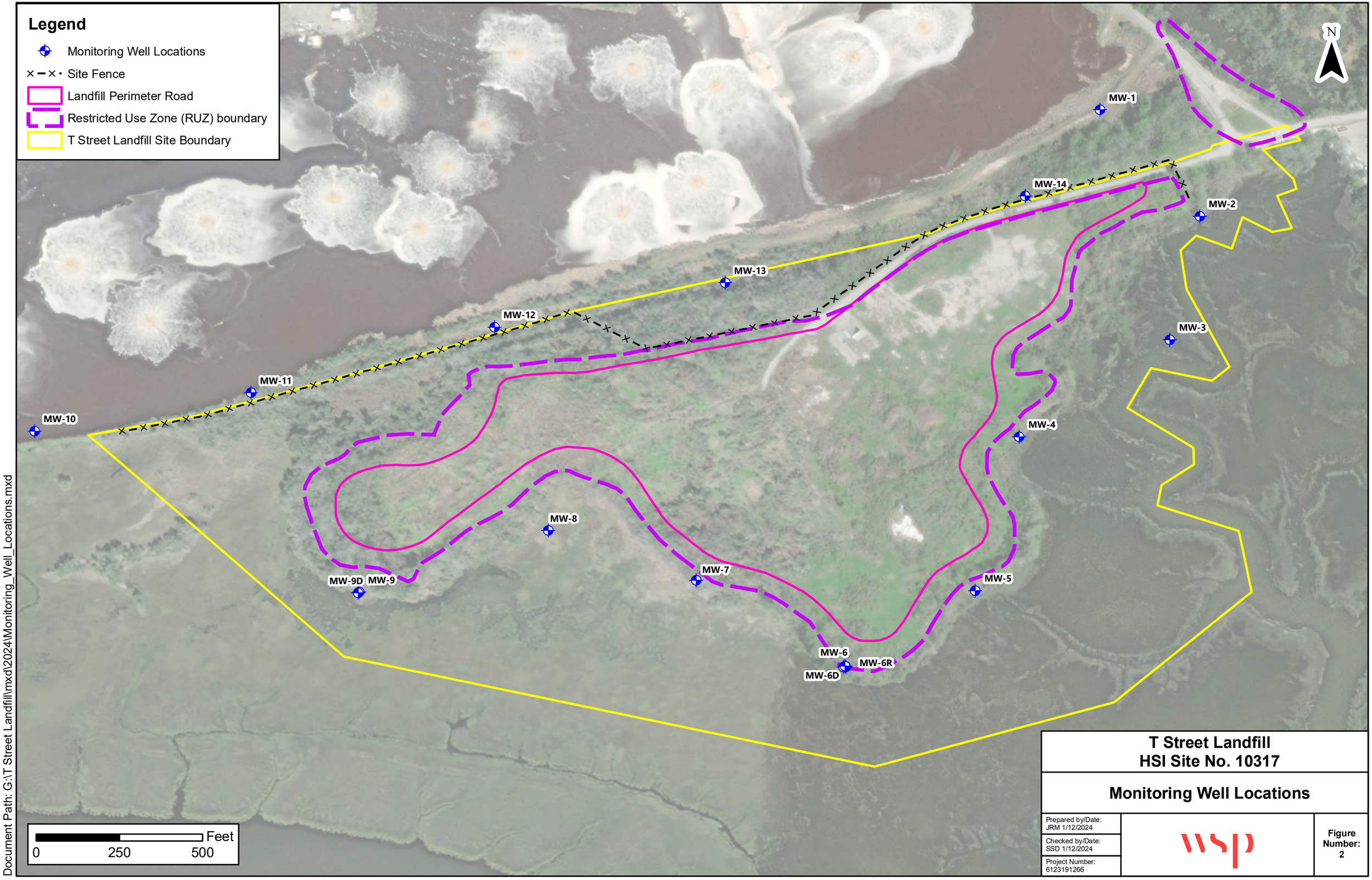
Feet
0 2,000 4,000

Document Path: G:\T Street Landfill\mxd\2024\Site Location.mxd

T Street Landfill
HSI Site No. 10317

Site Location Map

Prepared by/Date: JRM 1/12/2024	wsp	Figure Number: 1
Checked by/Date: SSD 1/12/2024		
Project Number: 6123191266		



Document Path: G:\T Street Landfill\mxd\2024\Monitoring_Well_Locations.mxd

T Street Landfill
HSI Site No. 10317

Monitoring Well Locations

Prepared by/Date: JRM 1/12/2024	wsp	Figure Number: 2
Checked by/Date: SSD 1/12/2024		
Project Number: 6123191266		

Legend

- Proposed Methane Sample Location
- Site Fence
- Landfill Perimeter Road
- Restricted Use Zone (RUZ) boundary
- T Street Landfill Site Boundary

N

M-1
M-2
M-3
M-4
M-5
M-6
M-7
M-8
M-9
M-10
M-11
M-12
M-13
M-14
M-15
M-16
M-17
M-18
M-19
M-20
M-21
M-22

0 150 300 Feet

T Street Landfill
HSI Site No. 10317

Proposed Soil Gas Sample Locations

Prepared by/Date: JRM 1/15/2024	wsp	Figure Number: 3
Checked by/Date: SSD 1/15/2024		
Project Number: 6123191266		

Document Path: G:\T Street Landfill\mxd\2024\Proposed Soil Gas Sample Locations.mxd

APPENDIX B

SITE INSPECTION FORM

Site Inspection

Date: _____ Weather Conditions: _____ NOTE: Append photographs or sketches as appropriate.
Attachments: ☐

DATE	ITEM INSPECTED	CONDITION	INSPECTED BY	CORRECTION ACTION TAKEN (if necessary)
	Fencing and other Barriers: — Inspect for damage allowing access to landfill			
	Fencing Locks: — Check for proper operation and replace damaged locks			
	Signage: — Check for general condition and legibility			
	Cover Erosion: — Inspect for rills in cover, regrade with clean fill, and reseed/gravel as necessary			
	Vegetative Cover: — Inspect grass and reseed barren areas — Remove any trees or brushy growth			
	Access Road: — Inspect gravel surface and fill or recover as necessary			
	Toe of Landfill Cover: — Inspect cover condition and effectiveness; repair as necessary			
	Perimeter Buffer Area: — Inspect general condition of trees — Document areas less than three trees deep			

APPENDIX C

WELL CONSTRUCTION DIAGRAMS

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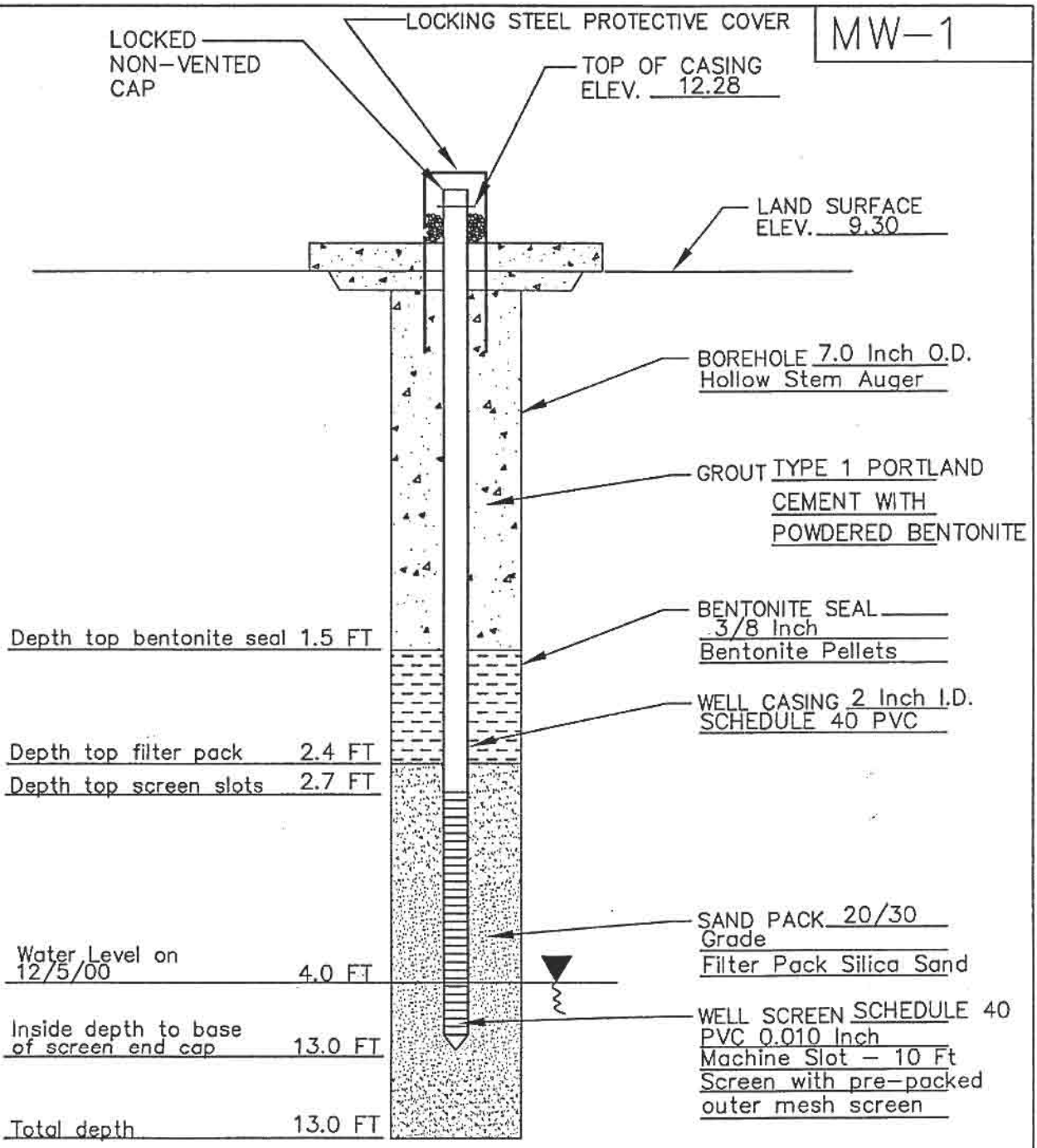
AHS 12/21/00

MW-1



WELL CONSTRUCTION DIAGRAM

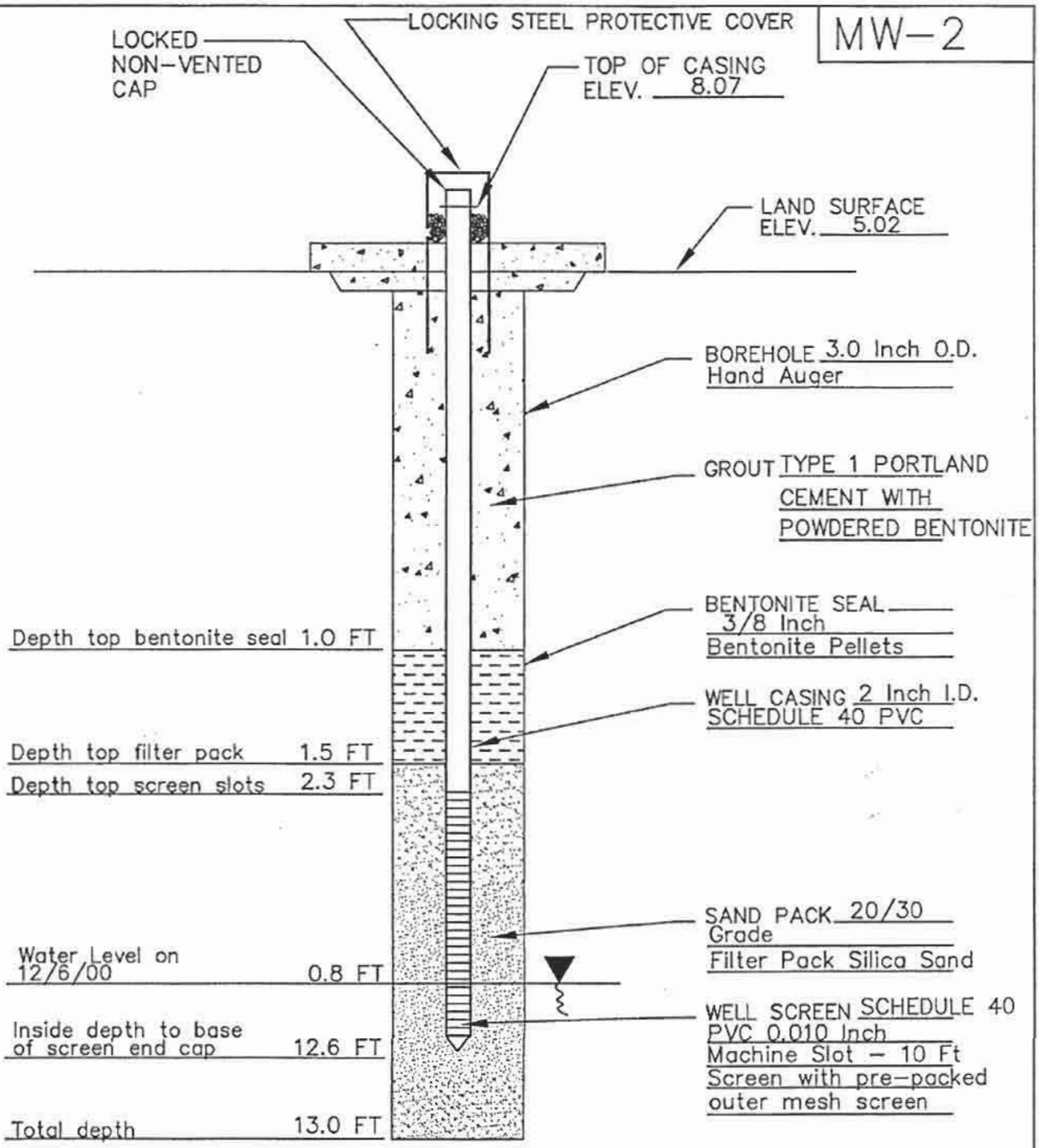
Not To Scale

PROJECT T STREET LANDFILL
PROJECT NO. 70764.06
WELL NO. MW-1 (SB-1)
DATE INSTALLED 11/28/00
DRILLING CONTRACTOR PROSONIC CORPORATION
RMT PERSONNEL BILL SHARP

RMT®

J:\CAD\HYDRO\TSTREET\WELLDIA\MW-1-MW6.DWG
AHS 12/21/00

MW-2



WELL CONSTRUCTION DIAGRAM

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PROJECT NO. 70764.06
WELL NO. MW-2 (SB-2)
DATE INSTALLED 12/4/00
DRILLING CONTRACTOR PROSONIC CORPORATION
RMT PERSONNEL BILL SHARP

RMT

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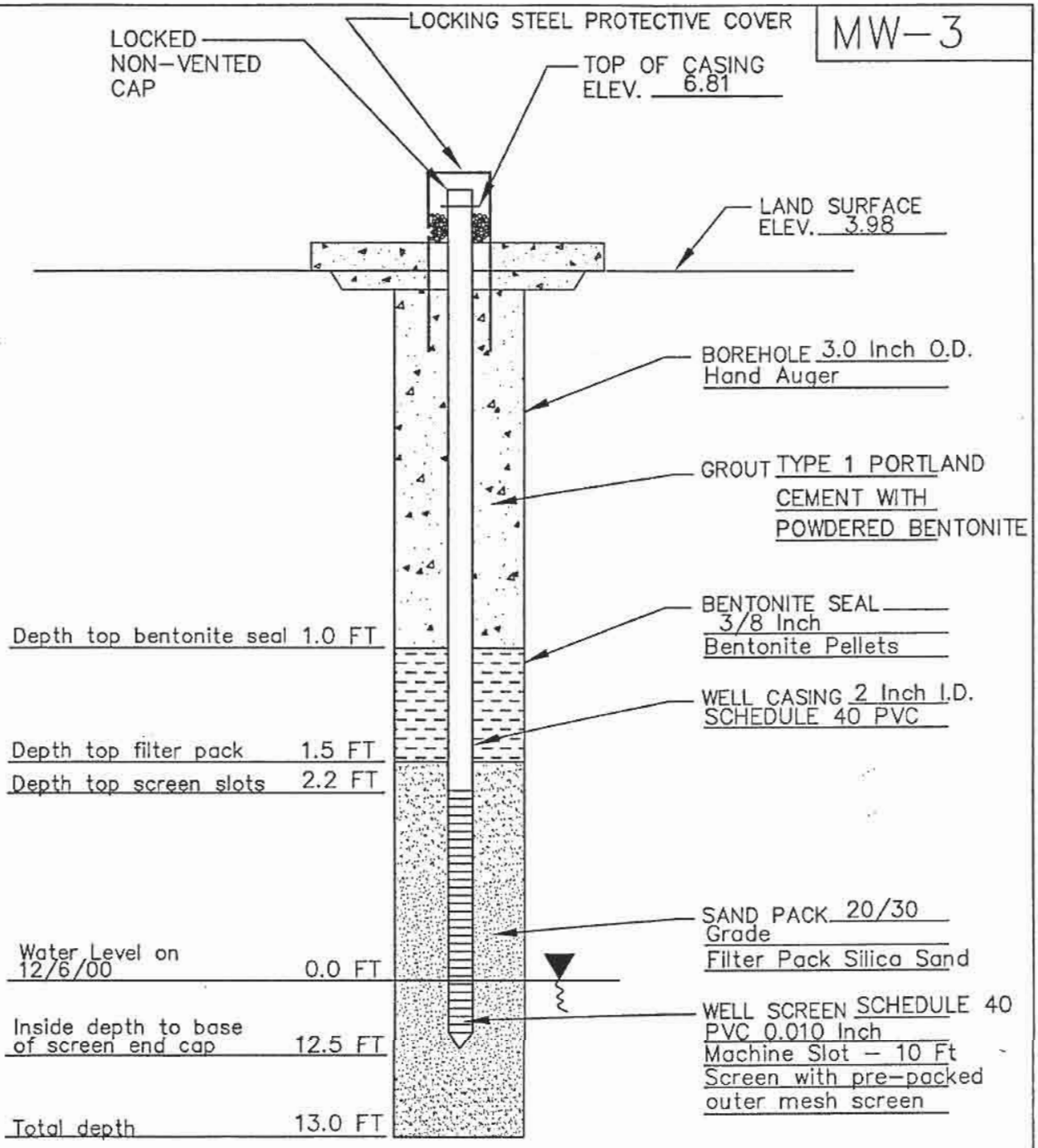
AHS 12/21/00

MW-3



WELL CONSTRUCTION DIAGRAM

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PROJECT NO. 70764.06
WELL NO. MW-3 (SB-3)
DATE INSTALLED 12/4/00
DRILLING CONTRACTOR PROSONIC CORPORATION
RMT PERSONNEL BILL SHARP

RMT®

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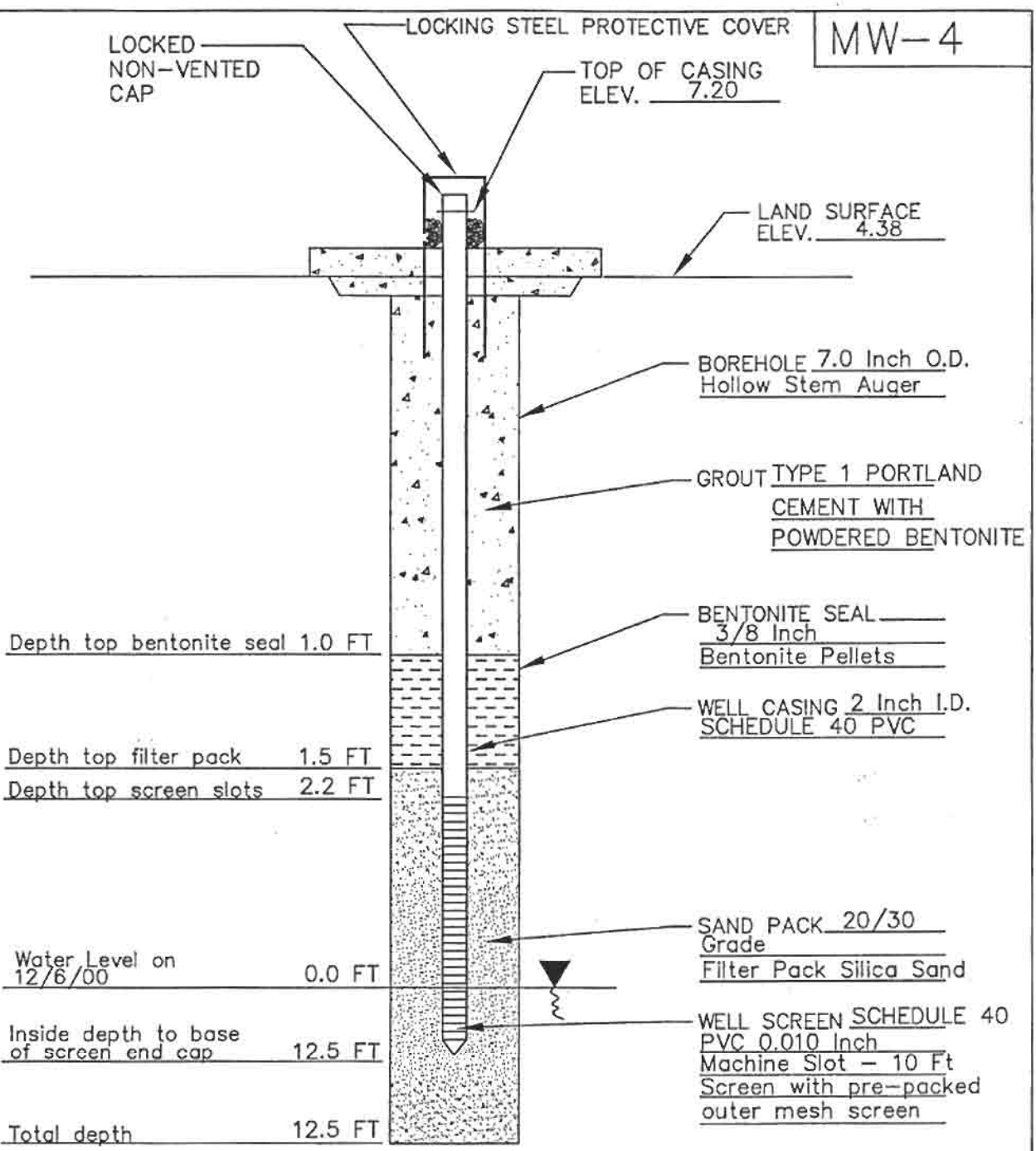
AHS 12/21/00

MW-4



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PROJECT NO. 70764.06
WELL NO. MW-4 (SB-4)
DATE INSTALLED 12/4/00
DRILLING CONTRACTOR PROSONIC CORPORATION
RMT PERSONNEL BILL SHARP

RMT

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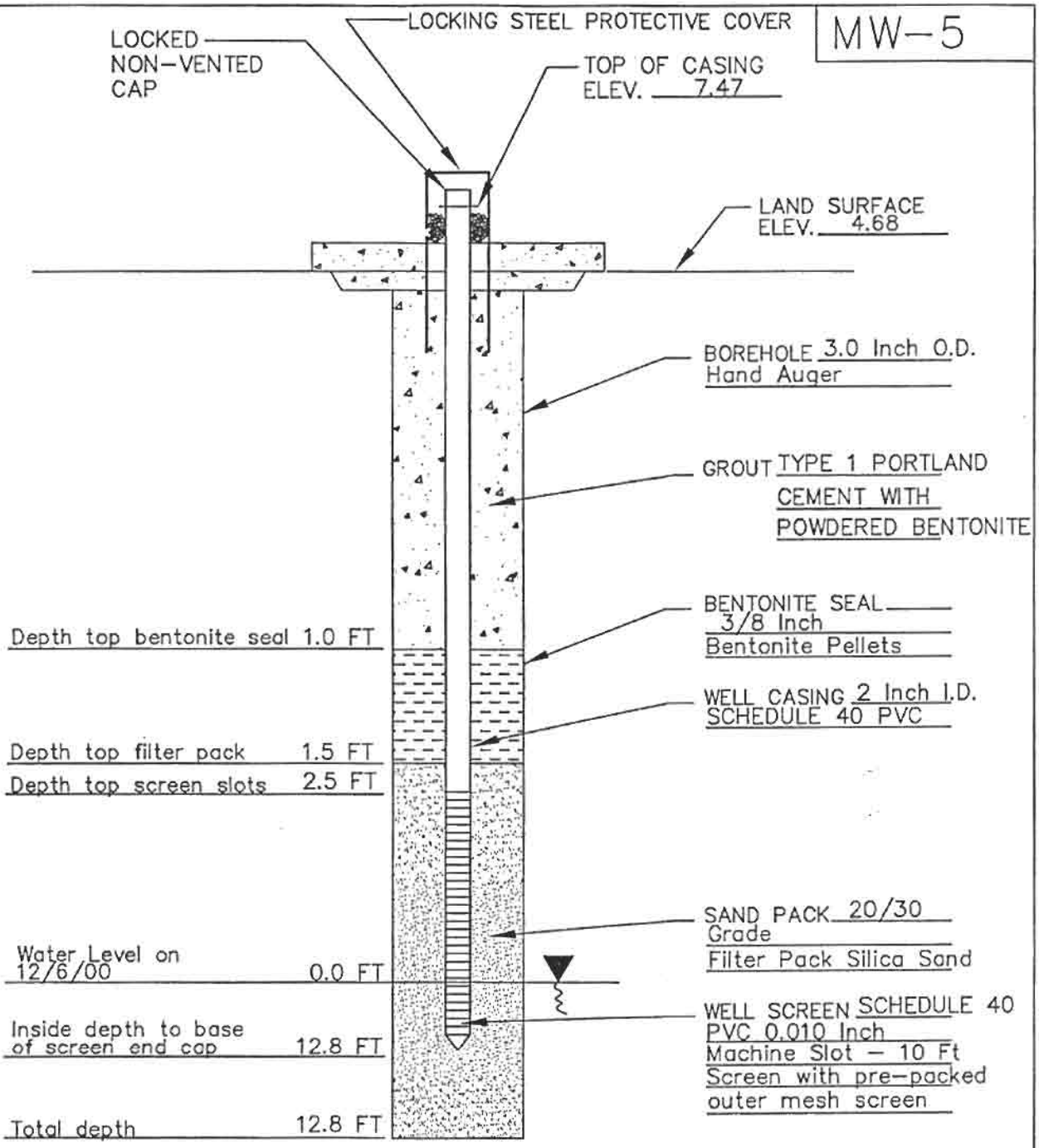
AHS 12/21/00

MW-5



WELL CONSTRUCTION DIAGRAM

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PROJECT NO. 70764.06
WELL NO. MW-5 (SB-5)
DATE INSTALLED 12/1/00
DRILLING CONTRACTOR PROSONIC CORPORATION
RMT PERSONNEL BILL SHARP

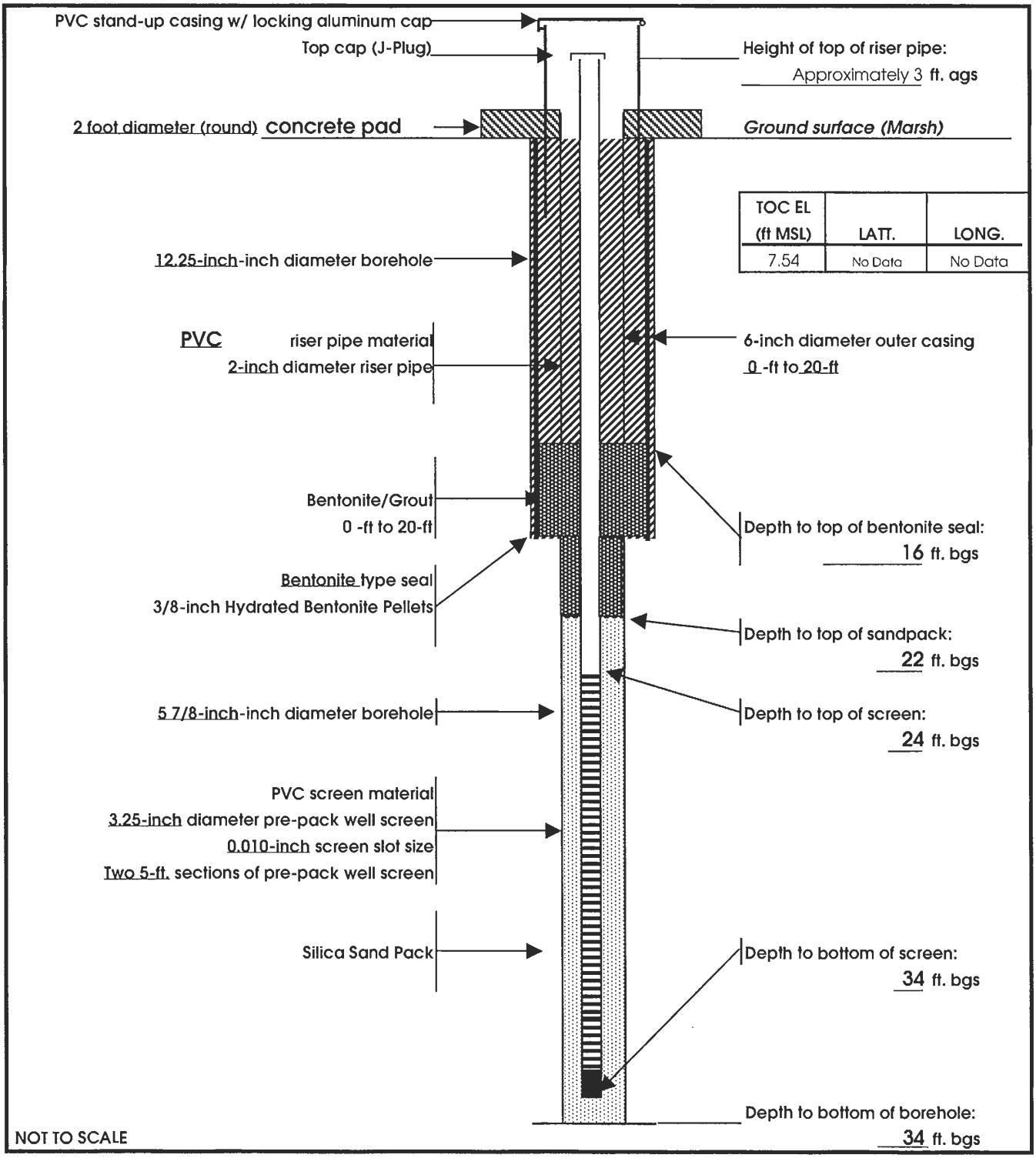
RMT

WELL CONSTRUCTION DETAIL

	Constr. Start	Constr. Finish
Date	7/26/2005	7/27/2005

Well ID:	MW-6D
Project No.:	00-70764.23
Geol.:	Erik R. Rolle
Rig Type:	CME-850 (Track)
Driller:	Parratt Wolff

Site name:	Former T Street Landfill
Address:	Brunswick, GA
Notes:	Well is a cased, deep well installed adjacent to MW-6R. Well is located in the marsh. 6-inch PVC Casing to 20 ft, well is screened (pre-pack) from 24 ft to 34 ft.

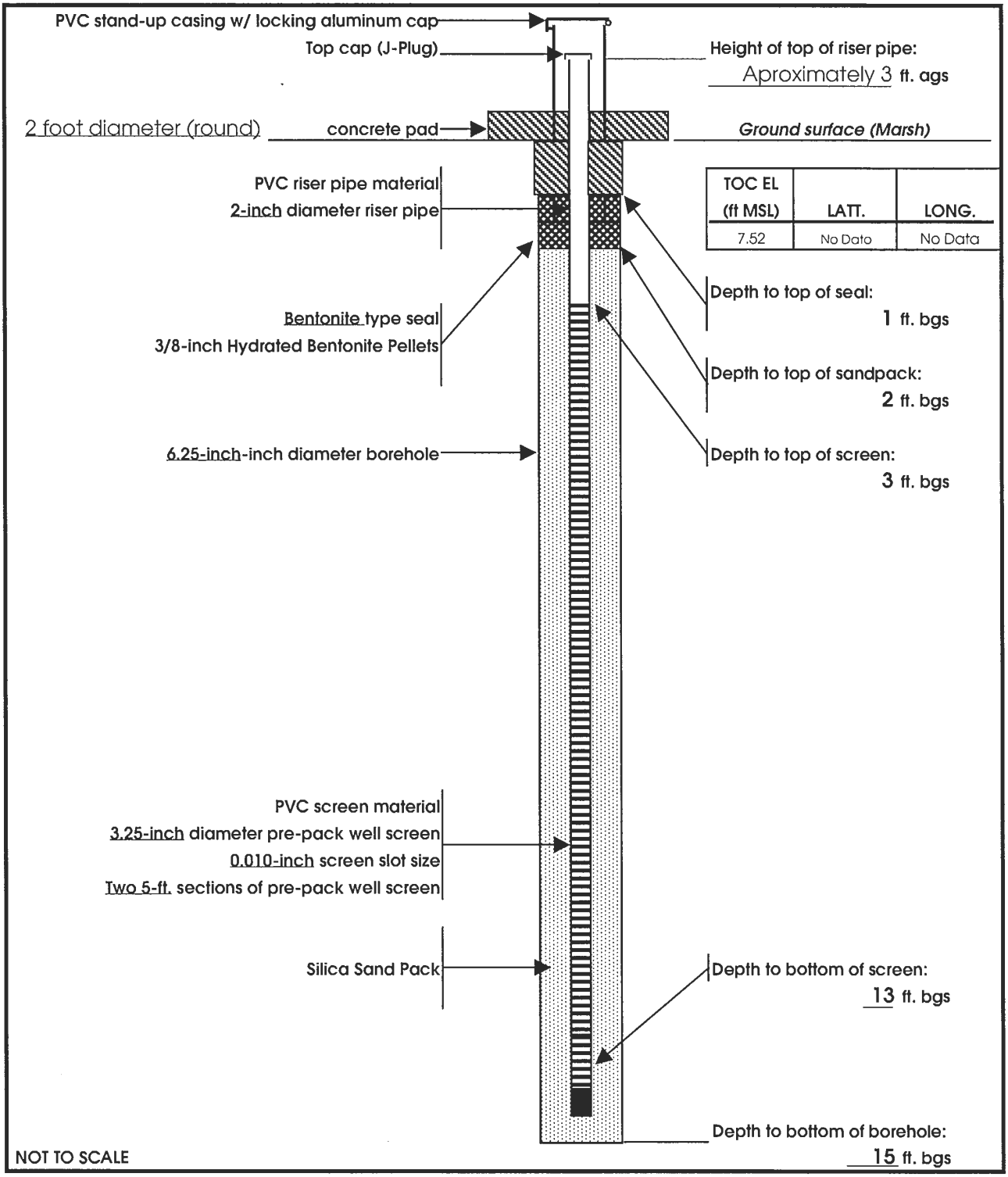


WELL CONSTRUCTION DETAIL

	Constr. Start	Constr. Finish
Date	7/27/2005	7/27/2005

Well ID:	MW-6R
Project No.:	00-70764.23
Geol.:	Erik R. Rolle
Rig Type:	CME-850 (Track)
Driller:	Parratt Wolff

Site name:	Former T Street Landfill
Address:	Brunswick, GA
Notes:	Well replaces former shallow well MW-6. Well is located in the marsh and screened (pre-pack screen) in primarily loose silt.



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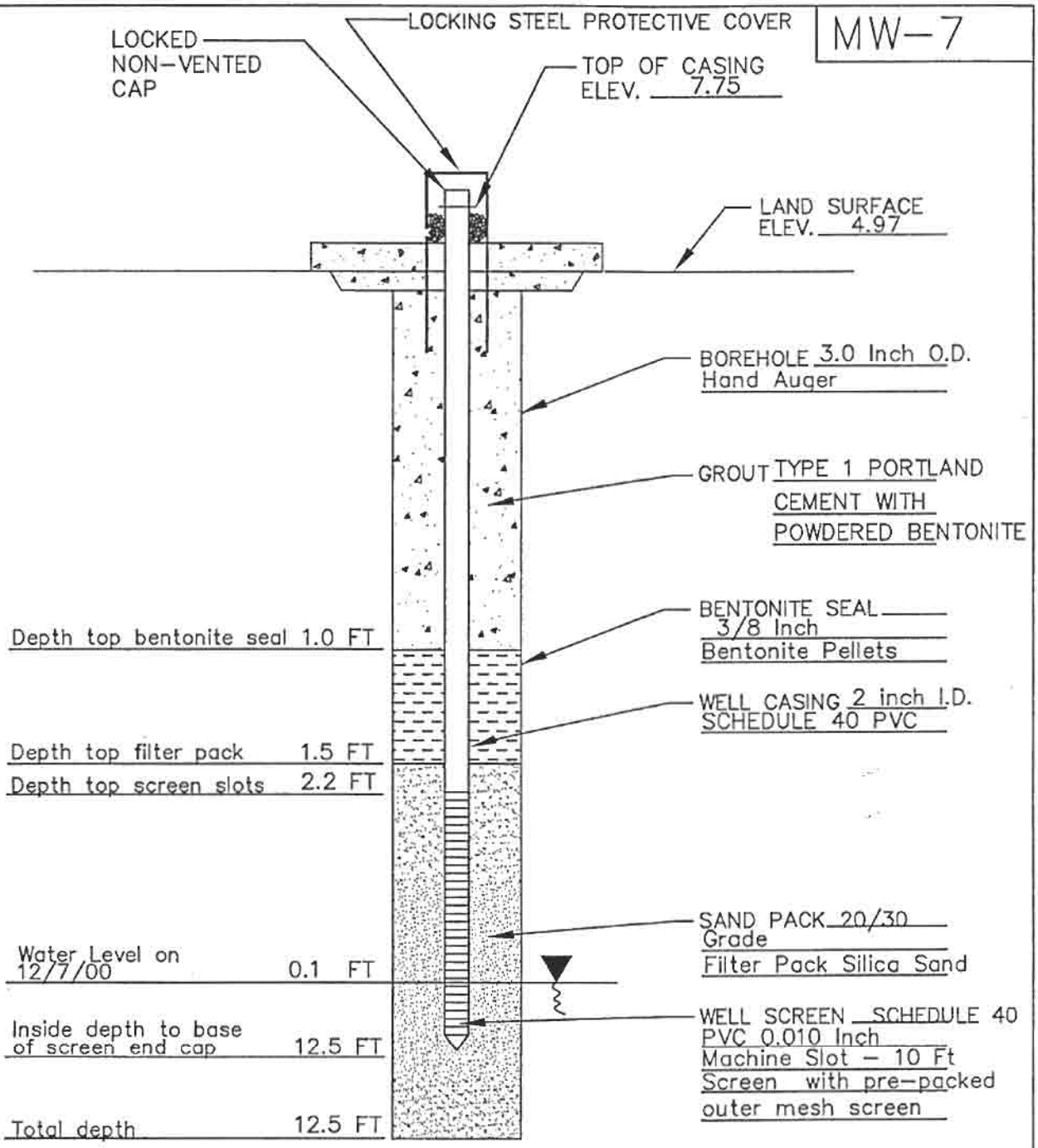
MW-7



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PROJECT NO. 70764.06
WELL NO. MW-7 (SB-7)
DATE INSTALLED 12/1/00
DRILLING CONTRACTOR PROSONIC CORPORATION
RMT PERSONNEL BILL SHARP

RMT

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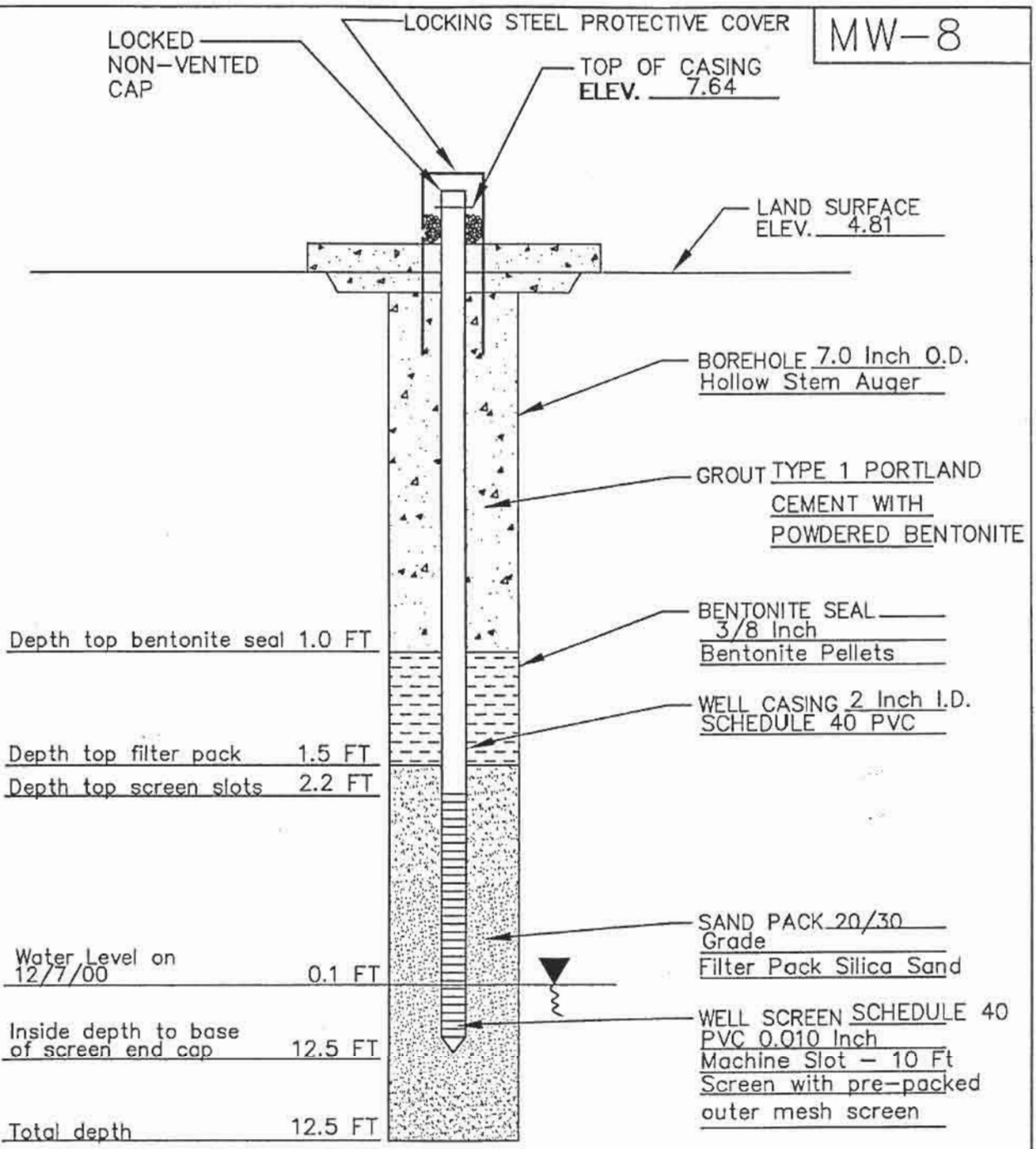
MW-8



WELL CONSTRUCTION DIAGRAM

Not To Scale

PROJECT T STREET LANDFILL

PROJECT NO. 70764.06

WELL NO. MW-8 (SB-8)

DATE INSTALLED 12/1/00

DRILLING CONTRACTOR PROSONIC CORPORATION

RMT PERSONNEL BILL SHARP

RMT

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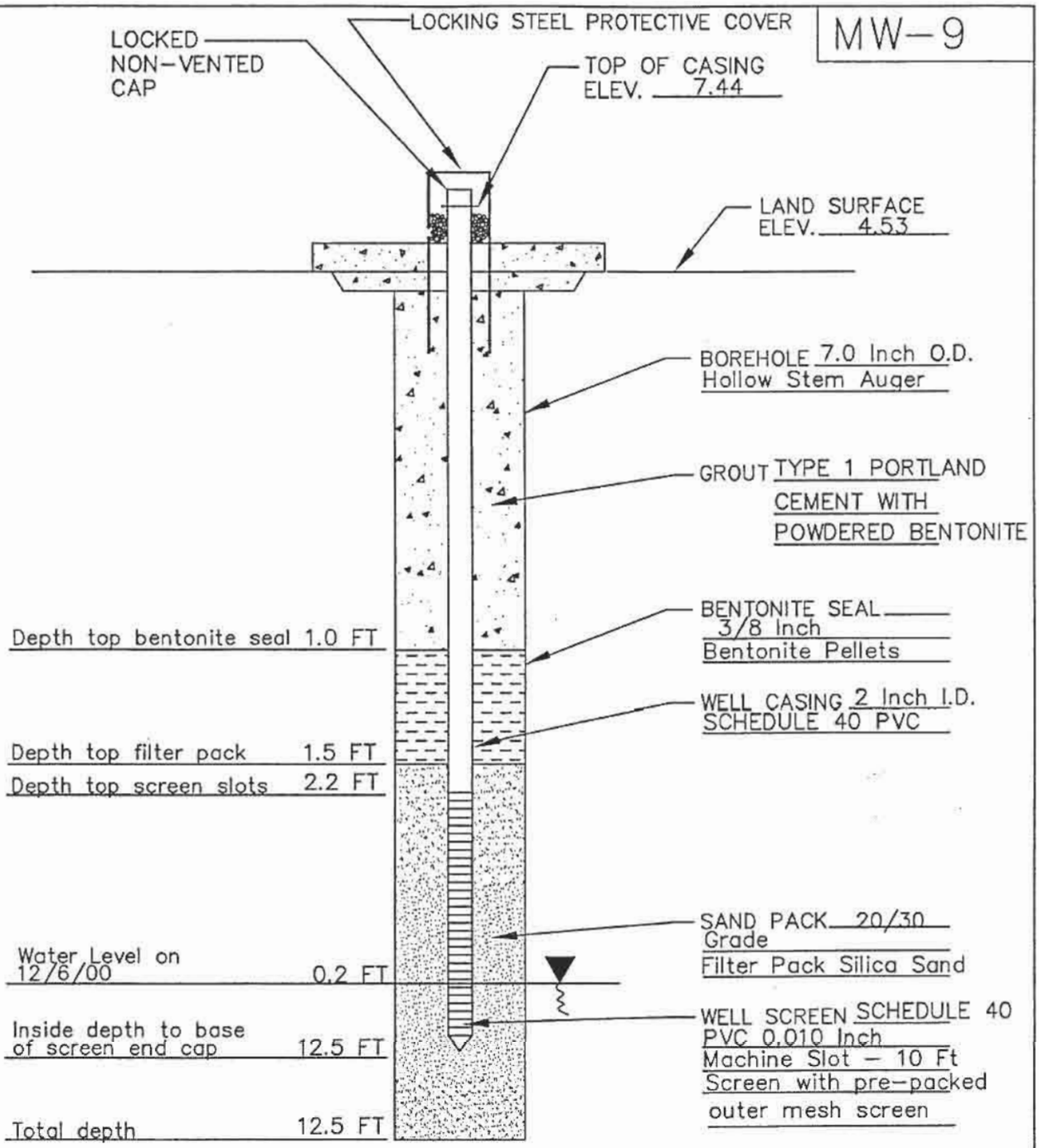
MW-9



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PROJECT NO. 70764.06
WELL NO. MW-9 (SB-9)
DATE INSTALLED 11/30/00
DRILLING CONTRACTOR PROSONIC CORPORATION
RMT PERSONNEL BILL SHARP

RMT

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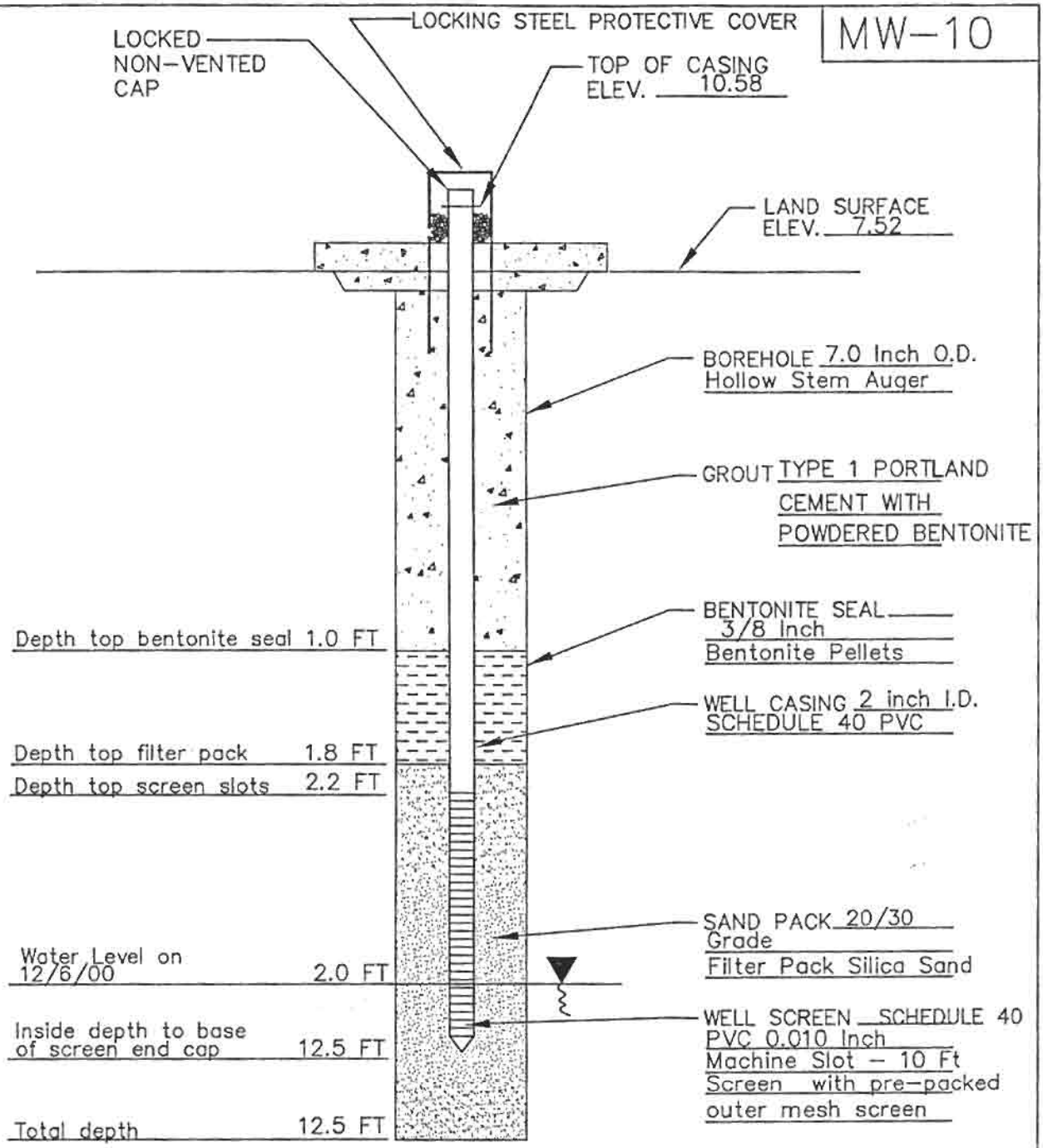
ahs 12/22/00

MW-10



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PROJECT NO. 70764.06
WELL NO. MW-10 (SB-10)
DATE INSTALLED 11/29/00
DRILLING CONTRACTOR PROSONIC CORPORATION
RMT PERSONNEL BILL SHARP

RMT

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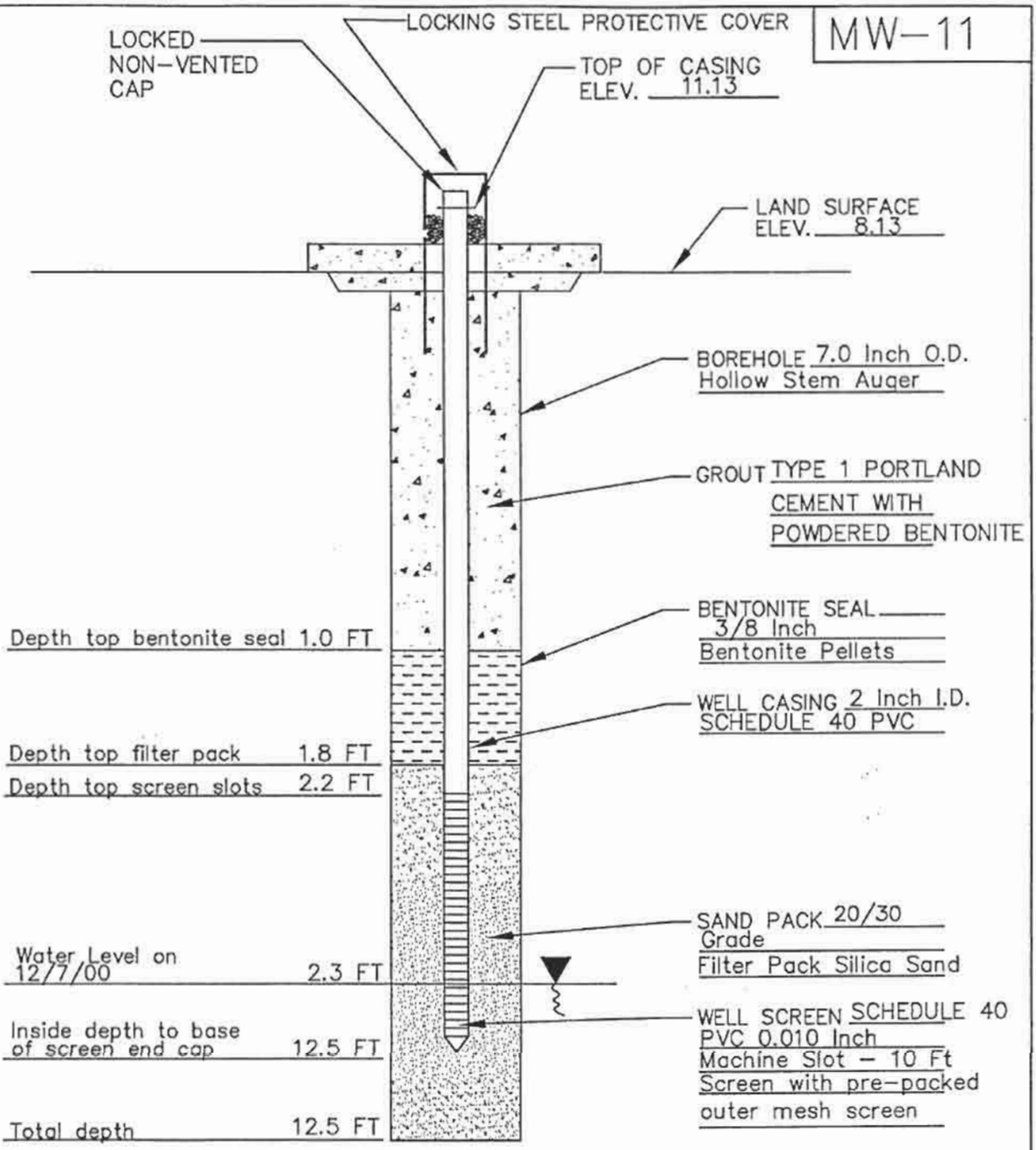
ahs 12/22/00

MW-11



WELL CONSTRUCTION DIAGRAM

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PROJECT T STREET LANDFILL

PROJECT NO. 70764.06

WELL NO. MW-11 (SB-11)

DATE INSTALLED 11/29/00

DRILLING CONTRACTOR PROSONIC CORPORATION

RMT PERSONNEL BILL SHARP

RMT

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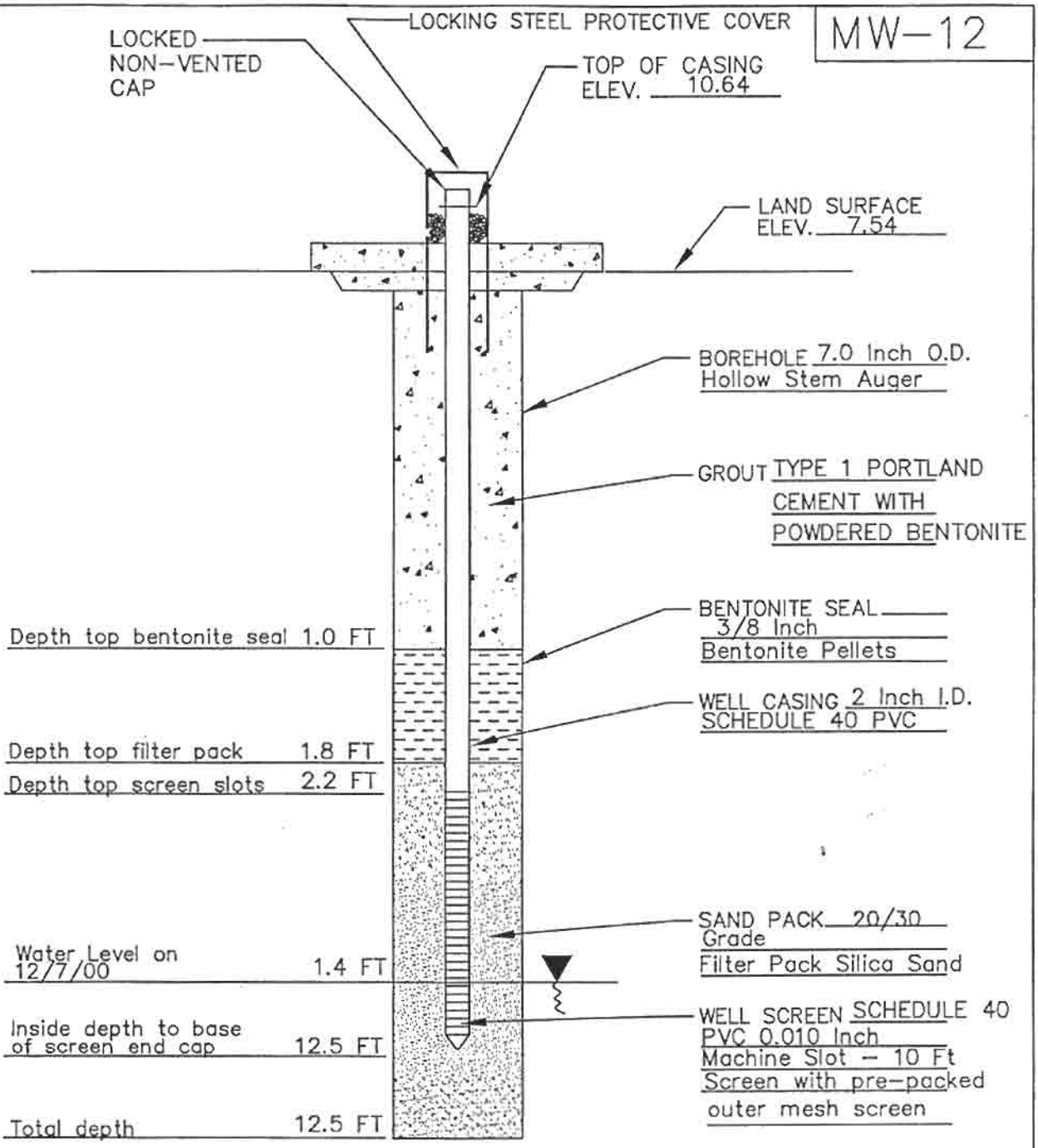
ahs 12/22/00

MW-12



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PROJECT T STREET LANDFILL

PROJECT NO. 70764.06

WELL NO. MW-12 (SB-12)

DATE INSTALLED 11/30/00

DRILLING CONTRACTOR PROSONIC CORPORATION

RMT PERSONNEL BILL SHARP

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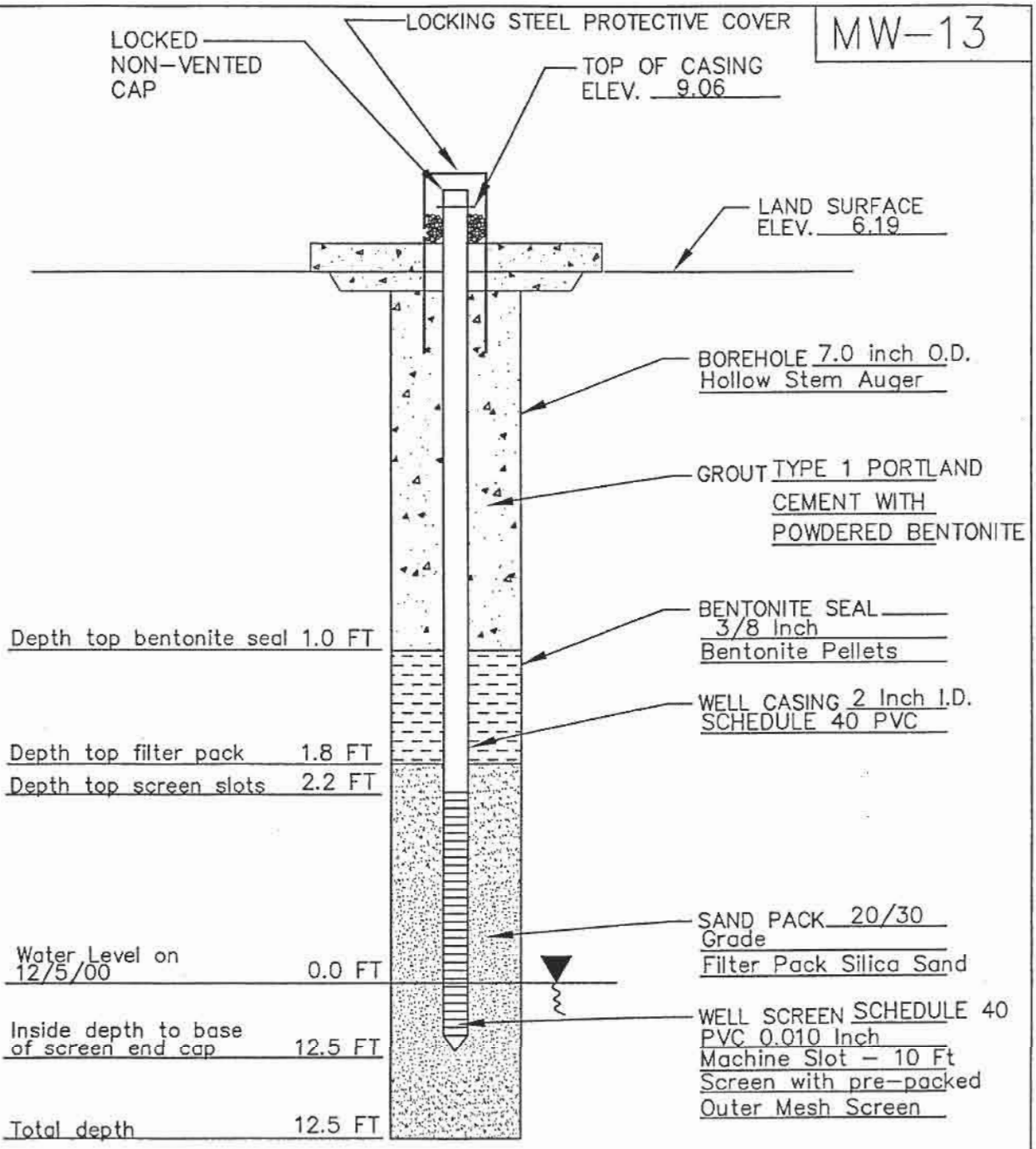
AHS 12/22/00

MW-13



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PROJECT NO. 70764.06
WELL NO. MW-13 (SB-13)
DATE INSTALLED 11/29/00
DRILLING CONTRACTOR PROSONIC CORPORATION
RMT PERSONNEL BILL SHARP

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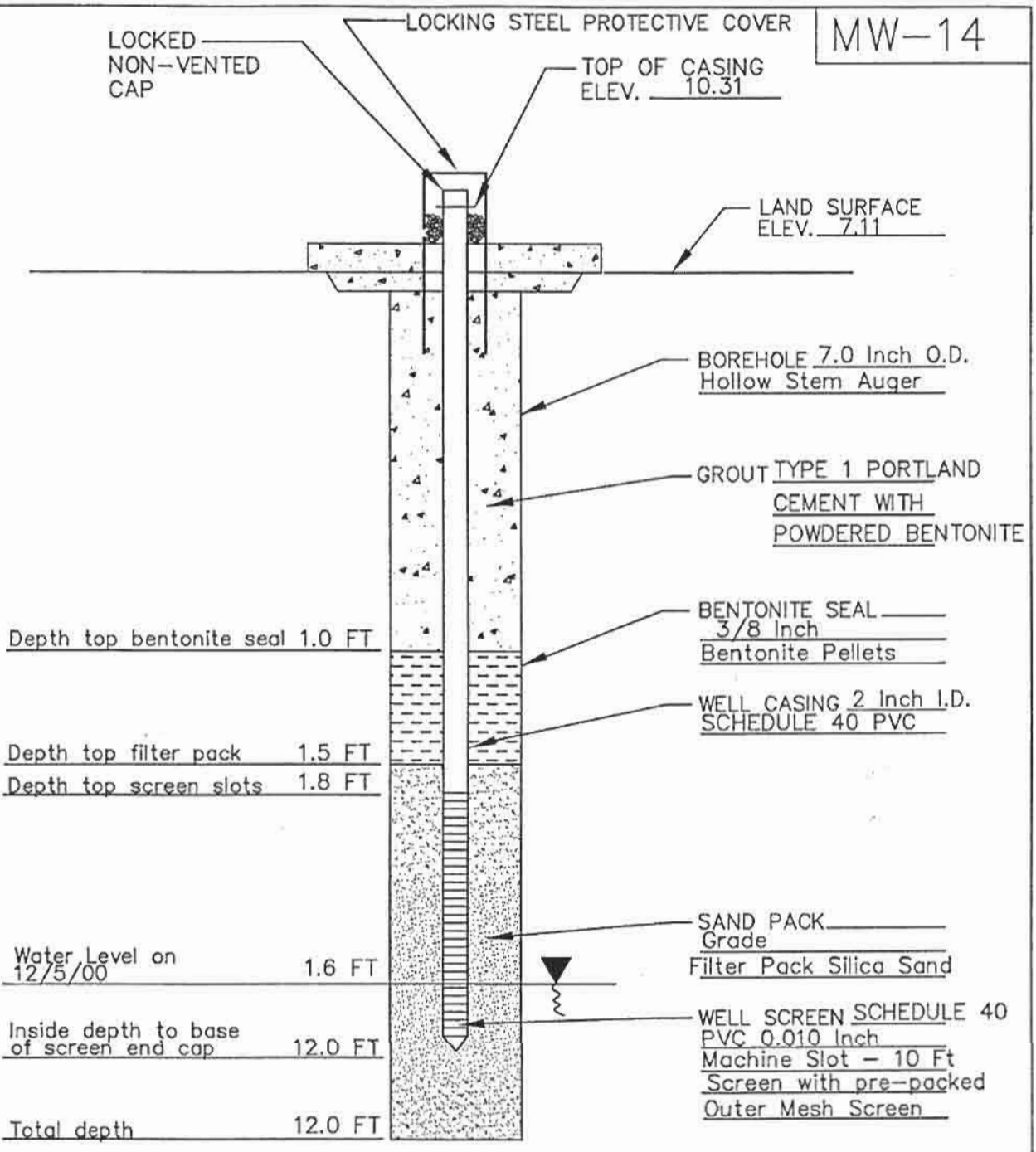
AHS 12/22/00

MW-14



WELL CONSTRUCTION DIAGRAM

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PROJECT T STREET LANDFILL

PROJECT NO. 70764.06

WELL NO. MW-14 (SB-14)

DATE INSTALLED 11/29/00

DRILLING CONTRACTOR PROSONIC CORPORATION

RMT PERSONNEL BILL SHARP

RMT®

APPENDIX D

WELL INSPECTION FORM

WELL INSPECTION – MW-1

Inspector's Name: _____ Date of Inspection: _____

Inspector's Signature: _____

INSPECTION ITEM	POTENTIAL DEFICIENCIES Inspector must check at minimum for specific deficiencies listed.	OBSERVATION AND ACTIONS Note deficiencies found. Record actions to correct deficiencies. Record and initial date of completion.

Groundwater Monitoring Wells

INSPECTION ITEM	POTENTIAL DEFICIENCIES	OBSERVATIONS / ACTIONS
Protective Casing	Damage, Deterioration	
Lock	Corrosion, Malfunction, Damage, and Tampering	
Concrete Pad	Cracking, Erosion	
Surrounding Area	Inaccessibility, excessive vegetative growth	
Well Label	Missing, illegible	
Other		

WELL INSPECTION – MW-2

Inspector's Name: _____ Date of Inspection: _____

Inspector's Signature: _____

INSPECTION ITEM	POTENTIAL DEFICIENCIES Inspector must check at minimum for specific deficiencies listed.	OBSERVATION AND ACTIONS Note deficiencies found. Record actions to correct deficiencies. Record and initial date of completion.

Groundwater Monitoring Wells

INSPECTION ITEM	POTENTIAL DEFICIENCIES	OBSERVATIONS / ACTIONS
Protective Casing	Damage, Deterioration	
Lock	Corrosion, Malfunction, Damage, and Tampering	
Concrete Pad	Cracking, Erosion	
Surrounding Area	Inaccessibility, excessive vegetative growth	
Well Label	Missing, illegible	
Other		

WELL INSPECTION – MW-3

Inspector's Name: _____ Date of Inspection: _____

Inspector's Signature: _____

INSPECTION ITEM	POTENTIAL DEFICIENCIES Inspector must check at minimum for specific deficiencies listed.	OBSERVATION AND ACTIONS Note deficiencies found. Record actions to correct deficiencies. Record and initial date of completion.

Groundwater Monitoring Wells

INSPECTION ITEM	POTENTIAL DEFICIENCIES	OBSERVATIONS / ACTIONS
Protective Casing	Damage, Deterioration	
Lock	Corrosion, Malfunction, Damage, and Tampering	
Concrete Pad	Cracking, Erosion	
Surrounding Area	Inaccessibility, excessive vegetative growth	
Well Label	Missing, illegible	
Other		

WELL INSPECTION – MW-4

Inspector's Name: _____ Date of Inspection: _____

Inspector's Signature: _____

INSPECTION ITEM	POTENTIAL DEFICIENCIES Inspector must check at minimum for specific deficiencies listed.	OBSERVATION AND ACTIONS Note deficiencies found. Record actions to correct deficiencies. Record and initial date of completion.

Groundwater Monitoring Wells

INSPECTION ITEM	POTENTIAL DEFICIENCIES	OBSERVATIONS / ACTIONS
Protective Casing	Damage, Deterioration	
Lock	Corrosion, Malfunction, Damage, and Tampering	
Concrete Pad	Cracking, Erosion	
Surrounding Area	Inaccessibility, excessive vegetative growth	
Well Label	Missing, illegible	
Other		

WELL INSPECTION – MW-5

Inspector's Name: _____ Date of Inspection: _____

Inspector's Signature: _____

INSPECTION ITEM	POTENTIAL DEFICIENCIES Inspector must check at minimum for specific deficiencies listed.	OBSERVATION AND ACTIONS Note deficiencies found. Record actions to correct deficiencies. Record and initial date of completion.

Groundwater Monitoring Wells

INSPECTION ITEM	POTENTIAL DEFICIENCIES	OBSERVATIONS / ACTIONS
Protective Casing	Damage, Deterioration	
Lock	Corrosion, Malfunction, Damage, and Tampering	
Concrete Pad	Cracking, Erosion	
Surrounding Area	Inaccessibility, excessive vegetative growth	
Well Label	Missing, illegible	
Other		

WELL INSPECTION – MW-6D

Inspector's Name: _____ Date of Inspection: _____

Inspector's Signature: _____

INSPECTION ITEM	POTENTIAL DEFICIENCIES Inspector must check at minimum for specific deficiencies listed.	OBSERVATION AND ACTIONS Note deficiencies found. Record actions to correct deficiencies. Record and initial date of completion.

Groundwater Monitoring Wells

INSPECTION ITEM	POTENTIAL DEFICIENCIES	OBSERVATIONS / ACTIONS
Protective Casing	Damage, Deterioration	
Lock	Corrosion, Malfunction, Damage, and Tampering	
Concrete Pad	Cracking, Erosion	
Surrounding Area	Inaccessibility, excessive vegetative growth	
Well Label	Missing, illegible	
Other		

WELL INSPECTION – MW-6R

Inspector's Name: _____ Date of Inspection: _____

Inspector's Signature: _____

INSPECTION ITEM	POTENTIAL DEFICIENCIES Inspector must check at minimum for specific deficiencies listed.	OBSERVATION AND ACTIONS Note deficiencies found. Record actions to correct deficiencies. Record and initial date of completion.

Groundwater Monitoring Wells

INSPECTION ITEM	POTENTIAL DEFICIENCIES	OBSERVATIONS / ACTIONS
Protective Casing	Damage, Deterioration	
Lock	Corrosion, Malfunction, Damage, and Tampering	
Concrete Pad	Cracking, Erosion	
Surrounding Area	Inaccessibility, excessive vegetative growth	
Well Label	Missing, illegible	
Other		

WELL INSPECTION – MW-7

Inspector's Name: _____ Date of Inspection: _____

Inspector's Signature: _____

INSPECTION ITEM	POTENTIAL DEFICIENCIES Inspector must check at minimum for specific deficiencies listed.	OBSERVATION AND ACTIONS Note deficiencies found. Record actions to correct deficiencies. Record and initial date of completion.

Groundwater Monitoring Wells

INSPECTION ITEM	POTENTIAL DEFICIENCIES	OBSERVATIONS / ACTIONS
Protective Casing	Damage, Deterioration	
Lock	Corrosion, Malfunction, Damage, and Tampering	
Concrete Pad	Cracking, Erosion	
Surrounding Area	Inaccessibility, excessive vegetative growth	
Well Label	Missing, illegible	
Other		

WELL INSPECTION – MW-8

Inspector's Name: _____ Date of Inspection: _____

Inspector's Signature: _____

INSPECTION ITEM	POTENTIAL DEFICIENCIES Inspector must check at minimum for specific deficiencies listed.	OBSERVATION AND ACTIONS Note deficiencies found. Record actions to correct deficiencies. Record and initial date of completion.

Groundwater Monitoring Wells

INSPECTION ITEM	POTENTIAL DEFICIENCIES	OBSERVATIONS / ACTIONS
Protective Casing	Damage, Deterioration	
Lock	Corrosion, Malfunction, Damage, and Tampering	
Concrete Pad	Cracking, Erosion	
Surrounding Area	Inaccessibility, excessive vegetative growth	
Well Label	Missing, illegible	
Other		

WELL INSPECTION – MW-9

Inspector's Name: _____ Date of Inspection: _____

Inspector's Signature: _____

INSPECTION ITEM	POTENTIAL DEFICIENCIES Inspector must check at minimum for specific deficiencies listed.	OBSERVATION AND ACTIONS Note deficiencies found. Record actions to correct deficiencies. Record and initial date of completion.

Groundwater Monitoring Wells

INSPECTION ITEM	POTENTIAL DEFICIENCIES	OBSERVATIONS / ACTIONS
Protective Casing	Damage, Deterioration	
Lock	Corrosion, Malfunction, Damage, and Tampering	
Concrete Pad	Cracking, Erosion	
Surrounding Area	Inaccessibility, excessive vegetative growth	
Well Label	Missing, illegible	
Other		

WELL INSPECTION – MW-9D

Inspector's Name: _____ Date of Inspection: _____

Inspector's Signature: _____

INSPECTION ITEM	POTENTIAL DEFICIENCIES Inspector must check at minimum for specific deficiencies listed.	OBSERVATION AND ACTIONS Note deficiencies found. Record actions to correct deficiencies. Record and initial date of completion.

Groundwater Monitoring Wells

INSPECTION ITEM	POTENTIAL DEFICIENCIES	OBSERVATIONS / ACTIONS
Protective Casing	Damage, Deterioration	
Lock	Corrosion, Malfunction, Damage, and Tampering	
Concrete Pad	Cracking, Erosion	
Surrounding Area	Inaccessibility, excessive vegetative growth	
Well Label	Missing, illegible	
Other		

WELL INSPECTION – MW-10

Inspector's Name: _____ Date of Inspection: _____

Inspector's Signature: _____

INSPECTION ITEM	POTENTIAL DEFICIENCIES Inspector must check at minimum for specific deficiencies listed.	OBSERVATION AND ACTIONS Note deficiencies found. Record actions to correct deficiencies. Record and initial date of completion.

Groundwater Monitoring Wells

INSPECTION ITEM	POTENTIAL DEFICIENCIES	OBSERVATIONS / ACTIONS
Protective Casing	Damage, Deterioration	
Lock	Corrosion, Malfunction, Damage, and Tampering	
Concrete Pad	Cracking, Erosion	
Surrounding Area	Inaccessibility, excessive vegetative growth	
Well Label	Missing, illegible	
Other		

WELL INSPECTION – MW-11

Inspector's Name: _____ Date of Inspection: _____

Inspector's Signature: _____

INSPECTION ITEM	POTENTIAL DEFICIENCIES Inspector must check at minimum for specific deficiencies listed.	OBSERVATION AND ACTIONS Note deficiencies found. Record actions to correct deficiencies. Record and initial date of completion.

Groundwater Monitoring Wells

INSPECTION ITEM	POTENTIAL DEFICIENCIES	OBSERVATIONS / ACTIONS
Protective Casing	Damage, Deterioration	
Lock	Corrosion, Malfunction, Damage, and Tampering	
Concrete Pad	Cracking, Erosion	
Surrounding Area	Inaccessibility, excessive vegetative growth	
Well Label	Missing, illegible	
Other		

WELL INSPECTION – MW-12

Inspector's Name: _____ Date of Inspection: _____

Inspector's Signature: _____

INSPECTION ITEM	POTENTIAL DEFICIENCIES Inspector must check at minimum for specific deficiencies listed.	OBSERVATION AND ACTIONS Note deficiencies found. Record actions to correct deficiencies. Record and initial date of completion.

Groundwater Monitoring Wells

INSPECTION ITEM	POTENTIAL DEFICIENCIES	OBSERVATIONS / ACTIONS
Protective Casing	Damage, Deterioration	
Lock	Corrosion, Malfunction, Damage, and Tampering	
Concrete Pad	Cracking, Erosion	
Surrounding Area	Inaccessibility, excessive vegetative growth	
Well Label	Missing, illegible	
Other		

WELL INSPECTION – MW-13

Inspector's Name: _____ Date of Inspection: _____

Inspector's Signature: _____

INSPECTION ITEM	POTENTIAL DEFICIENCIES Inspector must check at minimum for specific deficiencies listed.	OBSERVATION AND ACTIONS Note deficiencies found. Record actions to correct deficiencies. Record and initial date of completion.

Groundwater Monitoring Wells

INSPECTION ITEM	POTENTIAL DEFICIENCIES	OBSERVATIONS / ACTIONS
Protective Casing	Damage, Deterioration	
Lock	Corrosion, Malfunction, Damage, and Tampering	
Concrete Pad	Cracking, Erosion	
Surrounding Area	Inaccessibility, excessive vegetative growth	
Well Label	Missing, illegible	
Other		

WELL INSPECTION – MW-14

Inspector's Name: _____ Date of Inspection: _____

Inspector's Signature: _____

INSPECTION ITEM	POTENTIAL DEFICIENCIES Inspector must check at minimum for specific deficiencies listed.	OBSERVATION AND ACTIONS Note deficiencies found. Record actions to correct deficiencies. Record and initial date of completion.

Groundwater Monitoring Wells

INSPECTION ITEM	POTENTIAL DEFICIENCIES	OBSERVATIONS / ACTIONS
Protective Casing	Damage, Deterioration	
Lock	Corrosion, Malfunction, Damage, and Tampering	
Concrete Pad	Cracking, Erosion	
Surrounding Area	Inaccessibility, excessive vegetative growth	
Well Label	Missing, illegible	
Other		

APPENDIX E

WELL MONITORING FORM

WATER SAMPLE LOG

PROJECT NAME:	PREPARED		CHECKED	
PROJECT NUMBER:	BY:	DATE:	BY:	DATE:

SAMPLE ID:	WELL DIAMETER: ☐ 2" ☐ 4" ☐ 6	☐ OTHER _____
WELL MATERIAL: ☐ PVC ☐ SS ☐ IRON ☐ GALVANIZED STEEL		☐ OTHER _____
SAMPLE TYPE: ☐ GW ☐ WW ☐ SW ☐ DI ☐ LEACHATE		☐ OTHER _____

PURGING	TIME:	DATE:	SAMPLE	TIME:	DATE:
PURGE METHOD:	☐ PUMP _____ ☐ BAILER _____		PH: _____ SU	CONDUCTIVITY: _____ umhos/cm	
			ORP: _____ MV	DO: _____ mg/L	
DEPTH TO WATER: _____ T/ PVC			TURBIDITY: _____ NTU		
DEPTH TO BOTTOM: _____ T/ PVC			☐ NONE ☐ SLIGHT ☐ MODERATE ☐ VERY		
WELL VOLUME: _____ ☐ LITERS ☐ GALLONS			TEMPERATURE: _____ °C	OTHER: _____	
VOLUME REMOVED: _____ ☐ LITERS ☐ GALLONS			COLOR: _____	ODOR: _____	
COLOR: _____ ODOR: _____			FILTRATE (0.45 um) ☐ YES ☐ NO		
TURBIDITY			FILTRATE COLOR: _____	FILTRATE ODOR: _____	
☐ NONE ☐ SLIGHT ☐ MODERATE ☐ VERY			QC SAMPLE: ☐ MS/MSD ☐ DUP- _____		
DISPOSAL METHOD: ☐ GROUND ☐ DRUM ☐ OTHER			COMMENTS:		

TIME	PURGE RATE (ML/MIN)	PH (SU)	CONDUCTIVITY (umhos/cm)	ORP (mV)	D.O. (mg/L)	TURBIDITY (NTU)	TEMPERATURE (°C)	WATER LEVEL (FEET)	CUMULATIVE PURGE VOLUME (GAL OR L)

NOTE: STABILIZATION TEST IS COMPLETE WHEN 3 SUCCESSIVE READINGS ARE WITHIN THE FOLLOWING LIMITS:
pH: +/- 10% COND.: +/- 10% ORP: +/- 10% D.O.: +/- 10% TURB: +/- 10% Or </= 5 TEMP.: +/- 0.5°C

BOTTLES FILLED		PRESERVATIVE CODES A - NONE B - HNO3 C - H2S04 D - NaOH E - HCL F - _____											
NUMBER	SIZE	TYPE	PRESERVATIVE	FILTERED				NUMBER	SIZE	TYPE	PRESERVATIVE	FILTERED			
				☐	Y	☐	N					☐	Y	☐	N
				☐	Y	☐	N					☐	Y	☐	N
				☐	Y	☐	N					☐	Y	☐	N
				☐	Y	☐	N					☐	Y	☐	N
				☐	Y	☐	N					☐	Y	☐	N

SHIPPING METHOD: _____	DATE SHIPPED: _____	AIRBILL NUMBER: _____
COC NUMBER: _____	SIGNATURE: _____	DATE SIGNED: _____

APPENDIX F

ANNUAL LETTER TEMPLATE

Transmittal Letter for the "Annual Inspection and Certification Report"

[Date]

Georgia Department of Natural Resources
EPD – Land Protection Branch, Brownfield Program
2 Martin Luther King, Jr. Drive, SE, Suite 1056, East Tower
Atlanta, Georgia 30334

Subject: Annual Inspection and Certification Report
T Street Landfill Site
Brunswick, Glynn County, Georgia

This document, with attachments, serves as the Annual Inspection and Certification Report for the T Street Landfill Site in Brunswick, Glynn County, Georgia (the "Site").

Summary

The findings of the annual inspection are summarized as follows:

- Groundwater sampling and testing exhibited .....
- The improved final cover over the landfill footprint continues to remain secure and intact.
- The property use remains non-residential.
- There continues to be no potable use of groundwater at the Property.

Consultant Certification

I certify that I am a qualified engineer/geologist or a qualified environmental professional who has received a baccalaureate or post-graduate degree in the engineering/geology, and have sufficient training and experience in designing and/or evaluating caps, as demonstrated by State registration and completion of accredited university courses, that enable me to make sound professional judgment regarding the effectiveness of engineering controls at the site. I also certify that this report meets the requirements set for in the Monitoring and Maintenance Plan for the site. I further certify that this report was prepared in conjunction with others working under my direction.

_____ _____

(Qualified Professional Signature) (Print Name)

Owner Certification

I certify under the 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 Property, 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 fines and imprisonment for knowing violations.

_____ _____

(Property Owner/Representative Signature) (Print Name)