



New Jersey Department of Environmental Protection
Site Remediation Program

Report Certifications for RCRA GPRA 2020, CERCLA, and Federal Facility Sites

These certifications are to be used for reports submitted for RCRA GPRA 2020, CERCLA, and Federal Facility Sites. The Department has developed guidance for report certifications for RCRA GPRA 2020, CERCLA, and Federal Facility Sites under traditional oversight. The "Person Responsible for Conducting the Remediation Information and Certification" is required to be submitted with each report. For those sites that are required or opt to use a Licensed Site Remediation Professional (LSRP) the report must also be certified by the LSRP using the "Licensed Site Remediation Professional Information and Statement". For additional guidance regarding the requirement for LSRPs at RCRA GPRA 2020, CERCLA and Federal Facility Sites see http://www.nj.gov/dep/srp/srra/training/matrix/quick_ref/rcra_cercla_fed_facility_sites.pdf.

Documents:

- "Letter Work Plan for FTMM-08 Boring 10 Area, Fort Monmouth, New Jersey" (2 August 2017)

PERSON RESPONSIBLE FOR CONDUCTING THE REMEDIATION INFORMATION AND CERTIFICATION

Full Legal Name of the Person Responsible for Conducting the Remediation: William R. Colvin

Representative First Name: William Representative Last Name: Colvin

Title: Fort Monmouth BRAC Environmental Coordinator (BEC)

Phone Number: (732) 380-7064 Ext: _____ Fax: _____

Mailing Address: P.O. Box 148

City/Town: Oceanport State: NJ Zip Code: 07757

Email Address: william.r.colvin18.civ@mail.mil

This certification shall be signed by the person responsible for conducting the remediation who is submitting this notification in accordance with Administrative Requirements for the Remediation of Contaminated Sites rule at N.J.A.C. 7:26C-1.5(a).

I certify under penalty of law that I have personally examined and am familiar with the information submitted herein, including all attached documents, and that based on my inquiry of those individuals immediately responsible for obtaining the information, to the best of my knowledge, I believe that the submitted information is true, accurate and complete. I am aware that there are significant civil penalties for knowingly submitting false, inaccurate or incomplete information and that I am committing a crime of the fourth degree if I make a written false statement which I do not believe to be true. I am also aware that if I knowingly direct or authorize the violation of any statute, I am personally liable for the penalties.

Signature: _____

Date: _____

Name/Title: William R. Colvin, PMP, CHMM, PG
BRAC Environmental Coordinator

Completed form should be sent to:

Mr. Ashish Joshi
New Jersey Department of Environmental Protection
Division of Remediation Management & Response
Bureau of Northern Field Operations
7 Ridgedale Avenue (2nd Floor)
Cedar Knolls, New Jersey 07927-1112



DEPARTMENT OF THE ARMY

OFFICE OF ASSISTANT CHIEF OF STAFF FOR INSTALLATION MANAGEMENT
U.S. ARMY FORT MONMOUTH
P.O. 148
OCEANPORT, NEW JERSEY 07757

2 August 2017

Mr. Ashish Joshi
Northern Bureau of Field Operations
7 Ridgedale Avenue
Cedar Knolls, NJ 07927

SUBJECT: Letter Work Plan for FTMM-08 Boring 10 Area, Fort Monmouth, New Jersey

Figures:

- Figure 1 - FTMM-08 Test Pit Delineation and Methane Gas Survey Results
- Figure 2 - Landfill Delineation Project Log
- Figure 3 - FTMM-08 Boring 10 Area Proposed Sample Locations

Tables:

- Table 1 - Sampling Summary for the FTMM-08 Boring 10 Area Work Plan Fort Monmouth, New Jersey

Previous Correspondence:

1. NJDEP Letter to the Army dated 2 November 2016, re: Response to NJDEP's June 3, 2016 Comments on the April 2016 *Final Remedial Investigation Report for FTMM-08 dated April 2016 (&Landfill Boundary Refinement for FTMM-08 dated January 2016) for Fort Monmouth, New Jersey*
2. Army Letter to the NJDEP dated 11 October 2016, re: Response to NJDEP's June 3, 2016 Comments on the April 2016 *Final Remedial Investigation Report for FTMM-08 dated April 2016 (&Landfill Boundary Refinement for FTMM-08 dated January 2016) for Fort Monmouth, New Jersey*
3. NJDEP letter to the Army dated 3 June 2016, re: *Final Remedial Investigation Report for FTMM-08 dated April 2016 (&Landfill Boundary Refinement for FTMM-08 dated January 2016).*

Dear Mr. Joshi:

The purpose of this work plan is to address the New Jersey Department of Environmental Protection (NJDEP) comments dated 03 June 2016 on the FTMM-08 Landfill Boundary Refinement and Remedial Investigation/Feasibility Study (RI/FS) Reports, which included a question regarding additional characterization of potential petroleum contamination observed in landfill delineation Boring 10.

Boring 10 is located between the designated landfill areas for FTMM-08 and FTMM-18 (**Figure 1**). Evidence of petroleum in soil and groundwater was previously observed during delineation of the FTMM-08 landfill. Boring 10 was advanced in February 2009 with a hand auger and the log (**Figure 2**) reported petroleum odors and elevated photoionization detector (PID) readings in soil from 2 feet

below ground surface (ft bgs) to 8 ft bgs, as well as a sheen on the groundwater observed at 3.5 ft bgs. The source of the petroleum hydrocarbons was unknown.

Two primary Geoprobe borings (M08B10-SB/GW-01 and M08B10-SB/GW-02) will be installed for supplemental characterization as shown on **Figure 3**. Boring M08B10-SB/GW-01 will be installed at the previous location of Boring 10, and M08B10-SB/GW-02 will be installed at an uphill location where the asphalt pavement from the Building 292 area discharges into the Parker Creek lowlands.

Each Geoprobe boring will be advanced to at least 4 feet below the water table (estimated at approximately 4 to 8 feet below ground surface) to assess current concentrations and vertical extent of petroleum hydrocarbons. Two groundwater samples will be collected from each temporary well within the Geoprobe location, and three soil samples will be collected from each boring:

- An upper soil sample will be collected from approximately 2.0-2.5 ft bgs (or another interval representative of the vadose zone);
- An intermediate sample will be collected near the water table, and
- A deeper sample will be collected from a 6-inch interval below the water table at a depth intended to be below the contaminated intermediate interval.

The upper and intermediate soil samples will be collected from the most contaminated intervals encountered based on field evidence (visual, olfactory, photoionization detector [PID] screening). If there is no field evidence of petroleum contamination, then samples will be collected from the upper (midpoint of the vadose zone), intermediate (water table), and deeper (3.5 ft below the water table) intervals.

If the primary borings exhibit field indications of petroleum contamination, then two additional contingency borings (M08B10-SB/GW-03 and M08B10-SB/GW-04) will be installed with the intent of bounding the horizontal extent of contamination.

Soil samples will be analyzed in accordance with the requirements for unknown petroleum hydrocarbons in Table 2-1 of the New Jersey Administrative Code (NJAC) 7:26E *Technical Requirements for Site Remediation*. Each soil sample will be analyzed for extractable petroleum hydrocarbons (EPH), and a minimum of 25 percent of the soil samples where EPH is detected will be analyzed for volatile organic compounds (VOCs) plus tentatively identified compounds (TICs), semivolatile organic compounds (SVOCs) plus TICs, polychlorinated biphenyls (PCBs), and Target Analyte List (TAL) metals. One soil sample from each boring will be selected to satisfy the 25 percent analyses for VOCs, SVOCs, PCBs and metals, and will be collected from either the sample with the greatest field indication of petroleum contamination, or from the intermediate depth sample location if there is no field evidence of contamination. The groundwater samples will be analyzed for VOCs plus TICs, SVOCs plus TICs, and TAL metals. A summary of the soil and groundwater sampling and analysis is presented in **Table 1**.

We look forward to your review of this proposed sampling plan, and approval or additional comments. The technical Point of Contact (POC) for this matter is Kent Friesen at (732) 383-7201 or by email at kent.friesen@parsons.com. Should you have any questions or require additional information, please contact me by phone at (732) 380-7064 or by email at william.r.colvin18.civ@mail.mil.

Mr. Ashish Joshi, NJDEP
Letter Work Plan for FTMM-08 Boring 10 Area
2 August 2017
Page 3 of 3

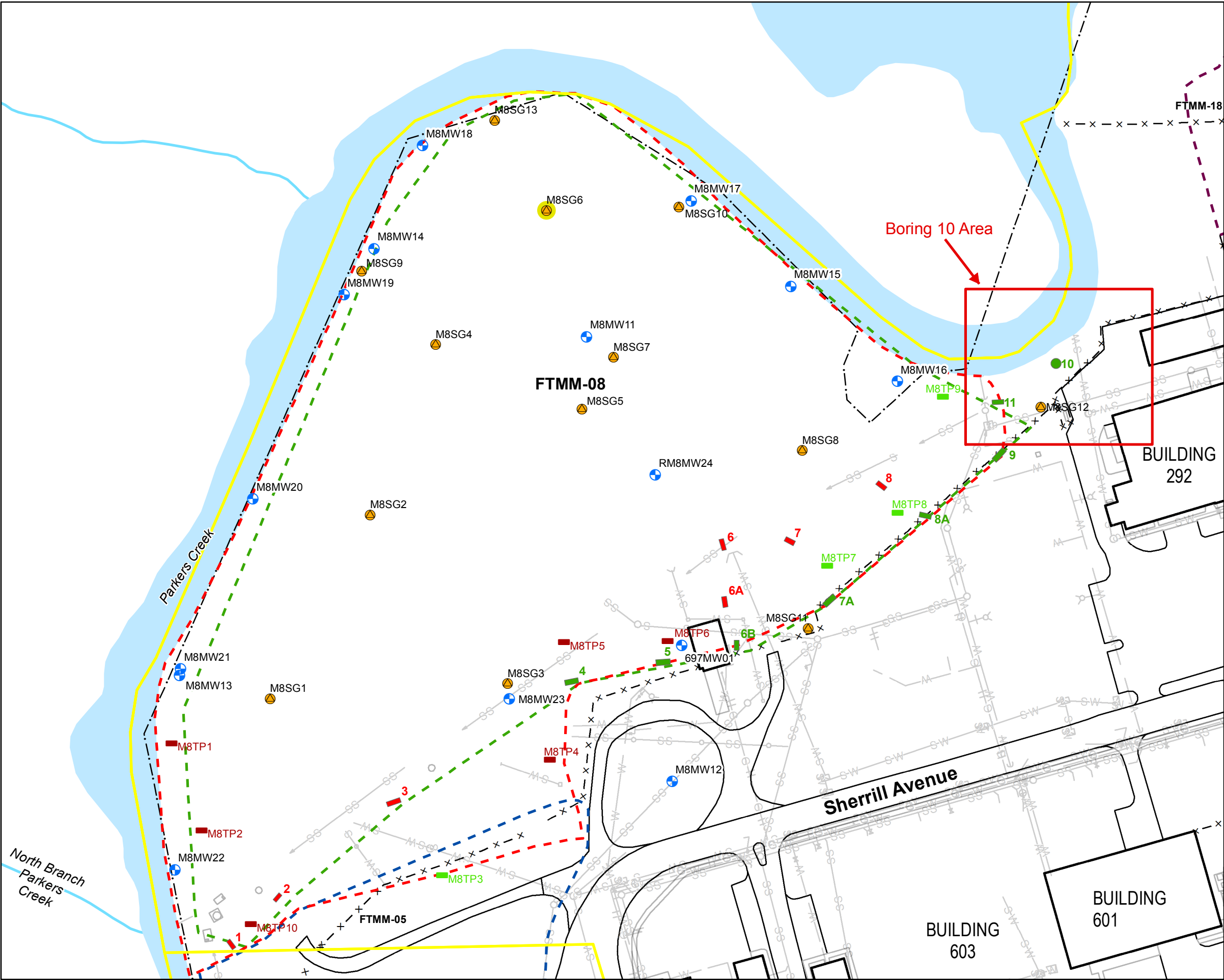
Sincerely,



William R. Colvin, PMP, CHMM, PG
BRAC Environmental Coordinator

cc: Ashish Joshi (e-mail and 2 hard copies)
Joseph Pearson, Calibre (e-mail)
James Moore, USACE (e-mail)
Jim Kelly, USACE (e-mail)
Cris Grill, Parsons (e-mail)

Z:\Projects\Huntsville Cont W912DY-09-D-0062\FTMM\CAD Files\GIS\Work Plans\M8 Boring 10 Area\Figure 1_FTMM-08.mxd



LEGEND:

- Methane Gas Sample Location
- Methane Gas Exceedance >25% LEL
- Shallow Monitoring Well
- Abandoned Monitoring Well
- 2010 Landfill Trench - Landfill Solid Waste Not Present
- 2010 Landfill Trench - Landfill Solid Waste Present
- 2010 Landfill Delineation Auger Boring Location - Landfill Solid Waste Not Present
- 2010 Landfill Delineation Auger Boring Location - Landfill Solid Waste Present
- 2015 Landfill Test Pit - Landfill Solid Waste Not Present
- 2015 Landfill Test Pit - Landfill Solid Waste Present
- FTMM-08 Landfill Revised Boundary (2015)
- FTMM-08 Landfill Revised Boundary (2010)
- FTMM-05 Landfill Revised Boundary (2015)
- FTMM-18 Landfill Revised Boundary (2015)
- Municipal Boundary
- Installation Boundary
- Existing Fence
- Demolished Fence

Source: FTMM Supplied CAD, 2013.

PARSONS
401 Diamond Drive NW,
Huntsville AL

**Fort Monmouth
New Jersey**

**FTMM-08 TEST PIT DELINEATION
AND METHANE GAS SURVEY RESULTS**

CREATED BY: RR	REVIEWED BY: JTK
DATE: JUL. 2017	FIGURE NUMBER: FIGURE 1
PROJECT NUMBER: 748810-02050	FILE: Figure 1_FTMM-08.mxd

Figure 2 - Boring 10 Log

LANDFILL DELINEATION PROJECT LOG

SUBSURFACE EVALUATOR: Harold Hornung
EQUIPMENT OPERATOR: Harold Hornung
DATE: 02/23/09
LANDFILL: M8 BORING ID: 10

BORING DESCRIPTION

LANDFILL MATERIAL PRESENT: YES NO X
DESCRIBE : _____

NATURAL MATERIAL PRESENT: YES X NO
DESCRIBE: 0-2' BGS brown, silty sand. 2'-6' BGS gray-blue sand with strong petroleum odor and MultiRae readings of 5 units above BG on the VOCs. 6'-8' BGS silty, clay with petroleum odor, GW encountered at 3.5' BGS, sheen observed on water.

GPS POSITIONS

Y COORDINATE (NORTHING): 540333.64 X COORDINATE (EASTING): 618244.76

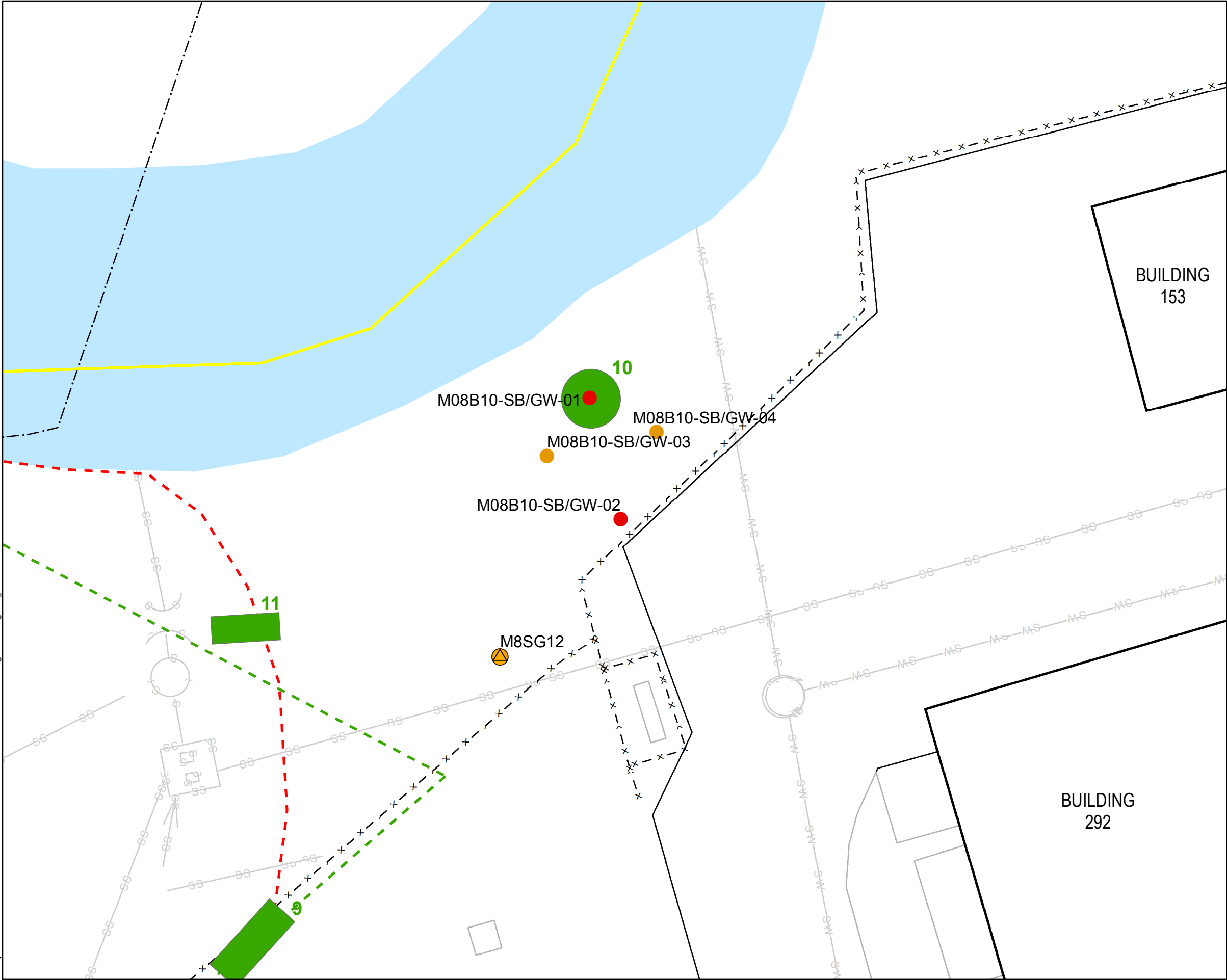
BORING PHOTOGRAPHED: YES X NO

PHOTOGRAPH IDENTIFICATION: 1440 1440

NOTES: Map color code = green

SUBSURFACE EVALUATOR SIGNATURE: _____

Z:\Projects\Huntsville Cont W912DY-09-D-0062\FTMM\CAD Files\GIS\Work Plans\M8 Boring 10 Area\Figure 3_FTM-08.mxd



LEGEND:

- Proposed Sampling Location
- Proposed Contingency Sample Location
- Methane Gas Sample Location
- Methane Gas Exceedance >25% LEL
- Shallow Monitoring Well
- Abandoned Monitoring Well
- 2010 Landfill Trench - Landfill Solid Waste Not Present
- 2010 Landfill Trench - Landfill Solid Waste Present
- 2010 Landfill Delineation Auger Boring Location - Landfill Solid Waste Not Present
- 2010 Landfill Delineation Auger Boring Location - Landfill Solid Waste Present
- 2015 Landfill Test Pit - Landfill Solid Waste Not Present
- 2015 Landfill Test Pit - Landfill Solid Waste Present
- FTMM-08 Landfill Revised Boundary (2015)
- FTMM-08 Landfill Revised Boundary (2010)
- FTMM-05 Landfill Revised Boundary (2015)
- FTMM-18 Landfill Revised Boundary (2015)
- Municipal Boundary
- Installation Boundary
- Existing Fence
- Demolished Fence

Source: FTMM Supplied CAD, 2013.

1 inch = 17 feet

0 5 10 20 Feet

PARSONS 401 Diamond Drive NW, Huntsville AL	Fort Monmouth New Jersey
FTMM-08 Boring 10 Area Proposed Sample Locations	
CREATED BY: AM	REVIEWED BY: KF
DATE: JUL. 2017	FIGURE NUMBER: FIGURE 3
PROJECT NUMBER: 748810-02050	FILE: Figure 3_FTM-08.mxd

TABLE 1
SAMPLING SUMMARY FOR THE FTMM-08 BORING 10 AREA WORK PLAN
FORT MONMOUTH, NEW JERSEY

Site	Location	Field Meter Readings ^{a/}	Fractionated EPH ^{b/}	VOCs + TICs by Method 8260C ^{c/}	SVOCs + TICs by Method 8270C ^{d/}	TALMetals by Method 6010C ^{e/}	PCBs by Method 8081B ^{f/}
Soil							
Parcel 48 (M-8 Boring 10)	Primary Borings (Figure 3): 2 soil borings, 3 samples each.	2 borings	6	2	2	2	2
Parcel 48 (M-8 Boring 10)	Contingency Borings (Figure 3): 2 soil borings, 3 samples each.	2 borings	6	2	2	2	2
Groundwater							
Parcel 48 (M-8 Boring 10)	Primary Borings (Figure 3): 2 temporary wells, 1 sample each.	2 wells	0	2	2	2	0
Parcel 48 (M-8 Boring 10)	Contingency Borings (Figure 3): 2 temporary wells, 1 sample each.	2 wells	0	2	2	2	0
QA/QC samples (see SAP for additional details) ^{g/}							
Field Duplicates (5% Sampling Frequency per media)		NA	1	1	1	1	1
Matrix Spike (5% Sampling Frequency per media)		NA	1	1	1	1	1
Matrix Spike Duplicate (5% Sampling Frequency per media)		NA	1	1	1	1	1
Trip Blank (1 per cooler of VOCs per media)		NA	0	1	0	0	0
QA Split (5% per media)		NA	1	1	1	1	1
Equipment Blank (5% Sampling Frequency per media)		NA	1	1	1	1	1
TOTAL		NA	17	14	13	13	9

Notes:

NA = not applicable.

^{a/} Field meter readings include, in soil samples: photoionization detector (PID) readings along entire soil column; and in groundwater: PID headspace, pH, temperature, electrical conductivity, dissolved oxygen (DO), oxidation-reduction potential (ORP), and turbidity.

^{b/} EPH = extractable petroleum hydrocarbons.

^{c/} VOCs = volatile organic compounds; TICs = tentatively identified compounds.

^{d/} SVOCs = semivolatile organic compounds; TICs = tentatively identified compounds.

^{e/} TAL = Target Analyte List metals.

^{f/} PCBs = polychlorinated biphenyls.

^{g/} QA/QC = quality assurance/quality control; SAP = Sampling and Analysis Plan. The requirement for QA/QC samples may be fulfilled with samples from other parcels.