



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.

Document: "Response to Comments to NJDEP Comments on Final Remedial Investigation Report for FTMM-18 dated October 2015 (and Landfill Boundary Refinement for FTMM-18 only dated January 2016)"

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: BRAC Environmental Coordinator

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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: 28 November, 2016

Name/Title: William R. Colvin / BRAC Environmental Coordinator



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

November 28, 2016

Ms. Linda Range
New Jersey Department of Environmental Protection
Bureau of Case Management
401 East State Street
PO Box 420/Mail Code 401-05F
Trenton, NJ 08625-0028

SUBJECT: *Final Remedial Investigation Report for FTMM-18 dated October 2015 (& Landfill Boundary Refinement for FTMM-18 only dated January 2016)*
Fort Monmouth, Oceanport, New Jersey
PIG000000032

Dear Ms. Range:

The Fort Monmouth (FTMM) team has reviewed the New Jersey Department of Environmental Protection (NJDEP) comments (letter dated August 9, 2016) on the subject submittals. Responses to the comments are provided below in the order in which they were presented in the comment letter.

A. Soil Analytical Results

A. COMMENT: *Elevated levels of PAHs and priority pollutant metals have been noted, however, contaminants of concern are to be addressed via engineering and institutional controls. Addressing all known levels of contamination in this manner is acceptable pending compliance with comments as noted below. If areas of obvious and/or significant contamination are encountered during the landfill preparation or capping activities, it is possible additional hot spot removal may be necessary.*

As has been previously discussed, all historically noted sample locations containing elevated levels of contamination are to be addressed via engineering and institutional controls (none may remain beyond the area undergoing capping). Figure 2-1 of the submittal displays historic boring locations relative to the 2015 revised boundary. A review of analytical data appears to confirm locations with elevated concentrations are located within the 2015 revised boundary. The cap must adequately include affected soil in the areas of B28, B34, and in particular B31, which exhibited elevated levels of PAHs while appearing to be located very close to and/or immediately adjacent to the designated southern boundary near Building 293 on Figure 2.1.

A. RESPONSE: The proposed remedy as described in the July 2015 FTMM-14 Remedial Investigation Report (RIR) remains the same, and contaminants of concern will be addressed via the NJDEP Site Remediation Program (SRP) policy since 1993 that allows for contaminants with appropriate institutional and engineering controls to be non-permanently remediated as long as the remedy is found to be protective of human health and the environment.

Institutional controls (i.e. deed notice) will be implemented at FTMM-18 as soil concentrations are above their respective NJDEP residential direct contact soil remediation standards (RDCSRS). Engineering controls (i.e. a cap) will also be implemented at FTMM-18 to address safety concerns and to protect non-residents from future exposure to solid waste at the landfill. A secondary benefit of the cap will be to prevent future exposure of soil concentrations above their respective NJDEP non-residential direct contact soil remediation standards (NRDCSRS). The applicable controls will be applied based on the level of contamination.

Soil borings, B28, B34, and B31 had benzo(a)pyrene concentrations greater than the residential and non-residential DRSSRS (200 mg/kg for both) in surface samples from 0 to 12 inches bgs. These soil borings locations will be addressed by the institutional and engineering controls previously described. Due to the location of the soil borings that contain PAH concentrations above the NRDCSRS being within the proposed landfill boundaries, there are no proposed changes to the landfill boundaries at FTMM-18.

B. Landfill Boundary

B. COMMENT: *Based upon reviews of the historic aerials, historic sampling locations and analytical findings, as well as test pit and boring locations and findings, the boundary as noted in Figure H1 of the January 2016 Landfill Boundary Refinement and Methane Gas Survey Report for Nine Landfills appears to adequately encompass the extent of known contamination and landfilled material at FTMM-18, with the following exceptions.*

Although located within the 2015 Revised Boundary of the landfill, Figure H1 of the Landfill Boundary Refinement submittal represents boring and test pit locations 6A, 7, 7A, 8 and 8A as "solid waste not present". The logs for those test pits and borings, however, found in Appendix A1 Appendix A of the RIR, indicate landfill material was present (concrete and asphalt were encountered from 1-2' at location 6A; concrete, asphalt and scrap metal from 2-4' at location 7).

M18TP10, based upon the test pit field log found in the Landfill Boundary Refinement submittal which references waste material including ash, coal and asphalt from 1-4', is shown on Figure H1 of the Landfill Boundary Refinement submittal as lying beyond the landfill boundary. Please explain why the boundary should not be expanded to include this area.

Two issues are noted with test pit M18TP14. The field log for test pit M18TP14 (and M28TP16 as well) indicates "no waste", however, the log references minimum or surface debris including glass and plastic bottles, and lumber. As has been discussed, the Department does not agree "minimum debris" exempts an area from consideration as landfill. M18TP14 and M18TP16 are

(marginally) located within the boundary as noted in Figure H1, however, any such debris located beyond the noted "boundary " must also be addressed either via extension of the engineering controls (cap) to those areas, or by incorporating the material into that area to be capped (e.g moving the material back into that area to be capped). Additionally, the log for M18TP14 includes a location sketch which appears to indicate MW25 is in the immediate area, rather than M1 8MW22. Please clarify.

B. RESPONSE: FTMM disagrees with NJDEP on their assessment of M18TP10, M18TP14, and M18TP16 and maintains that debris of a scattered nature and or *de minimus* quantity does not constitute a landfill. The solid waste regulations (N.J.A.C. 7:26-1.4) define a landfill as a solid waste facility or sanitary landfill, at which solid waste is deposited on or into the land as fill for the purpose of permanent disposal or storage for a period of time exceeding six months. As the contents of the test pits demonstrate, FTMM-18 contains primarily construction and demolition debris and does not constitute a landfill under the solid waste regulations definition. It is generally recognized that scattered debris may exist outside the limits of a consolidated landfill as such we made a judgment for FTMM-18 on a case-by-case basis that some debris (of a scattered nature and *de minimus*) in selected test pits did not constitute a landfill, which we believe is reasonable and appropriate given the wide variety of activities at FTMM over many decades. However, we believe the steps outlined below represent a reasonable compromise to achieve the project goals.

Figure H1 of the January 2016 Landfill Boundary Refinement Report has been revised to change borings 6A, 7, 7A, 8 and 8A from green indicating that "landfill solid waste not present" to red indicating that "landfill solid waste present". As these borings are within the October 2015 RIR, no revisions will be made to the landfill boundary.

At M18TP10, relocation of the debris material to within the landfill boundary is proposed to include this material under the proposed engineering control landfill cap.

The surface debris described in test pits M18TP14 and M18TP16 was observed at the ground surface and not within the actual test pits. During landfill cap construction, surface debris will be removed and placed under the landfill cover. Since no debris was observed at these two test pit locations below the ground surface, test pits M18TP14 and M18TP16 are correctly described as containing "no waste." The landfill boundary will not be revised in this area.

The log for M18TP14 incorrectly references M18MW22 as MW25, however, the rest of the location sketch correctly depicts the location of M18TP14 in relation to other site features. The corrected test pit log is attached. The location of M18TP14 is correctly depicted on the test pit log for M18TP16; on that test pit log location sketch, M18TP14 is shown 47.5 feet east of M18TP16.

C. Proposed Remedy

C. COMMENT: *The landfill is to be cleared, regraded, and covered with a vegetated two foot cap of clean soil. A vegetated soil cover of two feet of clean fill, and the implementation of a LUC through the filing of a deed notice with its incumbent inspection and reporting requirements, was previously deemed appropriate and is acceptable.*

It is anticipated a CEA will be established, to remain in place until NJDEP Ground Water Quality Standards are achieved at FTMM-18. The use of the term "residential" user, within the submittal's discussion as to the intent of a CEA, however, is not accurate. As you are aware, CEAs are established in order to provide notice that the constituent standards for a given aquifer classification are not or will not be met in a localized area due to natural water quality or anthropogenic influences, and that designated aquifer uses are suspended in the affected area for the term of the CEA. The Department shall restrict or require the restriction of potable ground water uses within any Classification Exception Area where there is or will be an exceedance of the Primary Drinking Water Quality Standards. The intent of such Departmental action is to ensure that the uses of the aquifer are restricted until standards are achieved

C. RESPONSE: FTMM concurs with the proposed remedy a of a vegetated soil cap for FTMM-18 as stated by NJDEP in comment C. The Army agrees with the NJDEP clarification of and the intent of a CEA. As discussed on our November 15, 2016 conference call, the selected remedy for groundwater is monitored natural attenuation (MNA) since groundwater concentrations at FTMM-18 are above the NJDEP Groundwater Quality Standards (GWQS) and Institutional Controls in the form of a CEA a will be implemented and remain in place until NJDEP GWQS are achieved at the site.

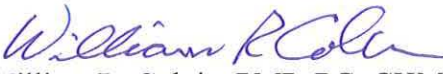
D. Miscellaneous

D. COMMENT: *As previously discussed with the Army, the Department did not approve the site-wide background soil or ground water quality investigations referenced in the submittal, e.g. the Weston 1995 Background Investigation or 2011 Brinkerhoff Background Metals Evaluation.*

D. RESPONSE: FTMM acknowledges that the site-wide background soil and ground water quality investigations referenced in the submittal have not been approved by NJDEP.

We look forward to your review of these responses and approval of the FTMM-18 RIR and the FTMM-18 portion of the *Landfill Boundary Refinement and Methane Gas Survey Report for Nine Landfills*. 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.

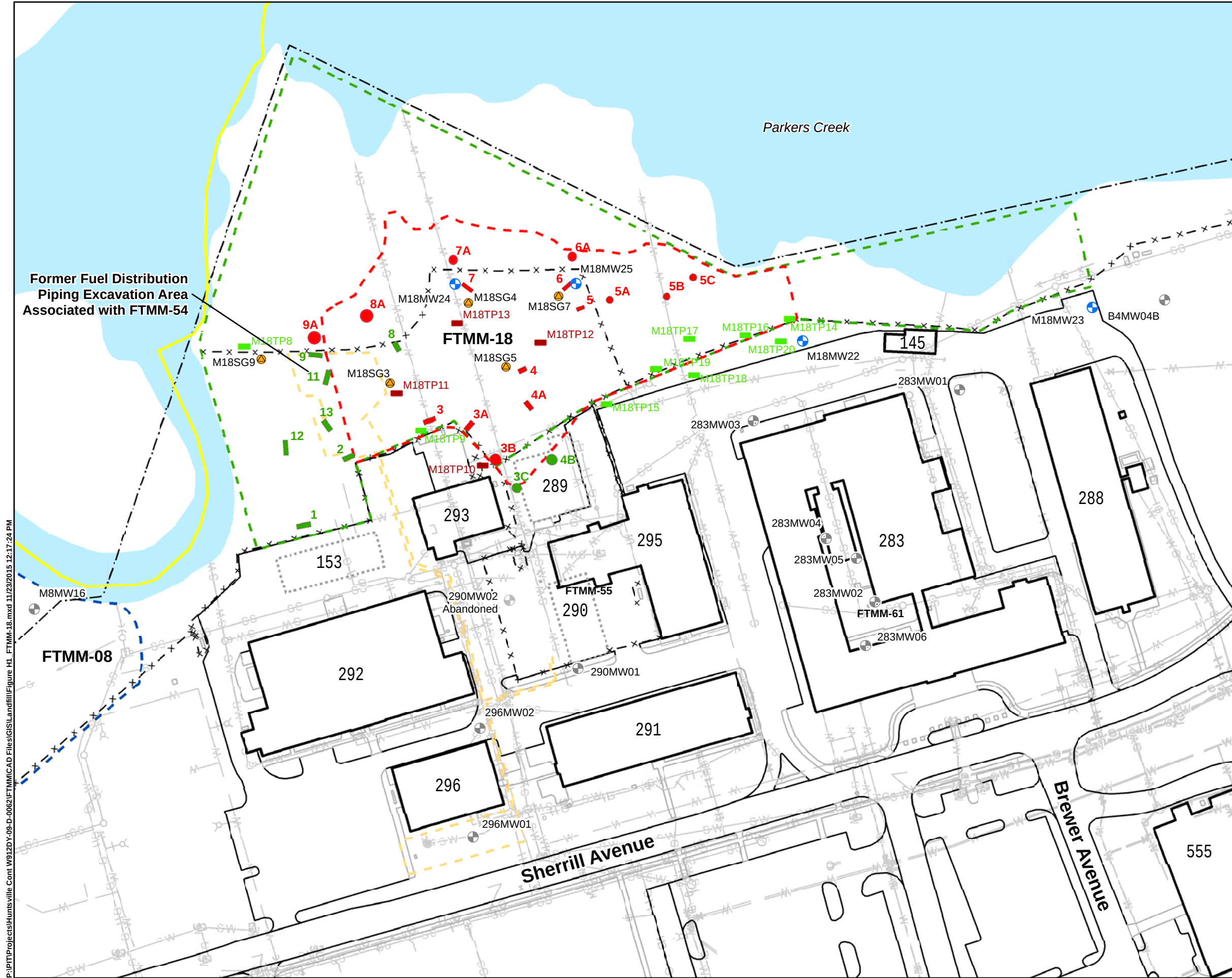
Sincerely,


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

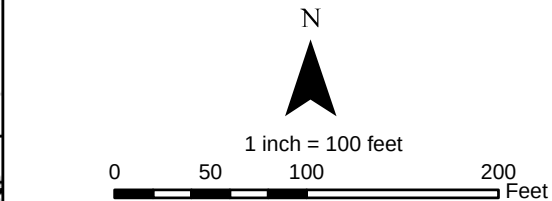
Attachments – Figure H1 - FTMM-18 Landfill Boundary Refinement and Methane Gas Survey Results

cc: Linda Range, NJDEP (e-mail and 3 hard copies)
Delight Balducci, HQDA ACSIM (e-mail)
Joseph Pearson, Calibre (e-mail)
James Moore, USACE (e-mail)
Jim Kelly, USACE (e-mail)
Cris Grill, Parsons (e-mail)

Figure H1 - FTMM-18 Landfill Boundary Refinement and Methane Gas Survey Results



- LEGEND:**
- Methane Gas Sample Location
 - Methane Gas Exceedance >25% LEL
 - FTMM-18 Shallow Monitoring Well
 - Shallow Monitoring Well Associated with Other Sites
 - Abandoned Shallow Monitoring Well
 - 2010 Landfill Trench - Landfill Solid Waste Not Present
 - 2010 Landfill Trench - Landfill Solid Waste Present
 - 2010 Landfill Auger Boring - Landfill Solid Waste Not Present
 - 2010 Landfill Auger Boring - Landfill Solid Waste Present
 - 2015 Landfill Test Pit - Landfill Solid Waste Not Present
 - 2015 Landfill Test Pit - Landfill Solid Waste Present
 - FTMM-18 Landfill Revised Boundary (2015)
 - FTMM-18 Landfill Revised Boundary (2010)
 - FTMM-08 Landfill Revised Boundary (2015)
 - FTMM-54 Boundary
 - Municipal Boundary
 - Installation Boundary
 - Existing Fence
 - Demolished Fence
 - Former Building (Demolished)



PARSONS 401 Diamond Drive NW, Huntsville AL		Fort Monmouth New Jersey	
FTMM-18 LANDFILL BOUNDARY REFINEMENT AND METHANE GAS SURVEY RESULTS			
CREATED BY: RR		REVIEWED BY: JTK	
DATE: NOV. 2016		FIGURE NUMBER: FIGURE H1	
PROJECT NUMBER: 748810-06035		FILE: Figure H1_FTMM-18.mxd	