

PRIN00030 May 6, 2025

Ms. Deanna Stockton, P.E., C.M.E. Municipal Engineer Municipality of Princeton 400 Witherspoon Street Princeton, NJ 08540

**RE:** Landfill Corrective Measures – Construction Services

Princeton Sanitary Landfill - Facility ID No. 132295

(Block 503, Lots 2 and 4)

Dear Ms. Stockton:

T&M Associates (T&M) is providing this request for additional funds for our additional efforts required for revisions related to the engineering design, plan preparation and approvals for corrective measures required for the proper closure of the Princeton Sanitary Landfill as well as construction services, Attached to this request is an invoice for the project which presents the total effort and descriptions of the additional efforts for Change Order #6. The invoice is provided for your review and approval.

#### **BACKGROUND**

The Municipality of Princeton (Princeton) is responsible for managing and maintaining the former municipal landfill, Princeton Sanitary Landfill, located off River Road in accordance with the Landfill Closure and Post Closure Plan required by the New Jersey Department of Environmental Protection (NJDEP), Division of Sustainable Waste Management (DSWM). As part of the required landfill closure plan, this project is the design and implementation of several corrective actions to repair the landfill cap and to improve drainage conditions at the site. These actions comprise the Corrective Action Plan (CAP) for the landfill.

The corrective actions are subject of several NJDEP enforcement notices including the following:

- March 21, 2019, Technical Notice of Deficiency (TNOD) by the Department regarding the Corrective Action Plan (CAP).
- August 12, 2019, Notice of Violation (NOV) by the Department regarding site conditions and the CAP actions.
- September 14, 2023, Technical Notice of Deficiency (TNOD) by the Department regarding site conditions and the CAP actions.

T&M has been assisting Princeton with the ongoing project for the design of proposed repairs of an existing erosional feature and side slopes at the Princeton Landfill. Since the original agreement between the Princeton and T&M, several agreement amendments have been received. The last agreement modification, Princeton PO#35169 Resolution 21-69, included the revision and submission of regulatory applications to the NJDEP Division of Land Resource Protection (DLRP),



bidding services and a stormwater analysis of and open channel design which resulted in several revised designs and regulatory submissions as documented in the "Additional Work" as described below.

On November 10, 2021, Princeton received an approval from the NJDEP DLRP for the CAP. However, since that time, additional comments have been received by the MCSCD and the DSWM which required a revised design of the CAP after the approval was issued by NJDEP. MCSCD reviewed and provided comments on the NJDEP DLUR approved design which resulted in a subsequent revised design of the drainage channel, revisions to the stormwater and stability calculations, and expansion of the scope of the project. Essentially, the SCD did not accept the NJDEP approved design, based on the velocity of the stormwater exceeding their requirements, which required a complex redesign and multiple meetings.

The revised design of the corrective measure called for the eroded areas of the landfill to be filled, and a defined and stabilized swale to be constructed, to safely convey stormwater runoff to the wooded area east of the landfill. In addition, the NJDEP DLRP requested the swale cross section be designed to incorporate vegetative cover in accordance with riparian standards.

Since the September 2022, T&M has finalized the following additional tasks to complete the design of the CAP and swale and to satisfy all the agencies. T&M is requesting this contract modification be approved for all additional engineering and agency approval efforts undertaken beyond the current scope of agreement(s).

#### A.) LANDFILL CORRECTIVE MEASURES - ADDITIONAL SCOPE OF WORK

T&M has performed work beyond the January 26, 2021 (Princeton PO#35169 Resolution 21-69) proposal defined scope. This work includes the following:

#### TASK 1: REVISED DESIGN OF CORRECTIVE MEASURES

The additional efforts included revisions to the plan sheets, and new stormwater and stability calculations. This required meetings and coordination with the various agencies.

T&M utilized the previously developed stormwater runoff model to determine the rate of flow generated by the 100-year storm flow as the design basis for drainage channel and designed the feature based on the stability of the channel and per the SCD requirements. Additionally, T&M revised the stormwater runoff model to also address the NJDEP's new flood hazard area rainfall calculations.

T&M revised the corrective action plans to address MCSCD, and NJDEP DSWM, as well as the additional comments received from Princeton. The design underwent a total of three (3) rounds of revised designs to address the required cross-section data, conveyance calculations, channel design and stabilization calculations to reduce velocities through the erosional feature over the entirety of landfill cap.

This effort resulted in \$106,547.39.



#### TASK 2: REVISE AND SUBMIT REGULATORY APPLICATIONS

Based on the revised corrective action design, T&M revised and submitted applications to the following agencies to obtain permit approvals:

T&M provided the various authorities with the updated plans for review and comment. The various submissions and distributions as identified below:

- NJDEP DLRP update submission March 9, 2023
- Mercer County Soil Conservation District update submission March 23, 2023
- Mercer County Soil Conservation District update submission August 21, 2023
- NJDEP DLUR update submission August 30, 2023
- Mercer County Soil Conservation District update submission January 17, 2024
- Mercer County Soil Conservation District update submission February 5, 2024

T&M prepared updated submissions to the MCSCD for Soil Erosion and Sediment Control Plan Certification. The application was submitted to the MCSCD pending comments from all other regulatory agencies. Three (3) rounds of submissions were made to the MCSCD to address various comments, along with two (2) rounds of submissions to the NJDEP DLRP and DSWM as well as Solid Waste. Note that the NJDEP application fee of \$6,450.00 will be absorbed by T&M Associates due to errors and omissions.

In addition, T&M coordinated and attended two (2) NJDEP Office of Permitting and Project Navigation meetings with the reviewers to discuss the approach and changes that were required based on the revised designs of the CAP as well as a field meeting with NJDEP Solid Waste and Water Quality.

This effort resulted in \$90,690.89.

### TASK 3: CLOSURE/POST-CLOSURE CARE PLAN AND CORRECTIVE ACTION PLAN

As noted above, the landfill has been closed and must comply with the approved Closure/Post Closure Care Plan for the facility. Additional efforts to address the NJDEP DSWM solid waste closure requirements included a revision to the CAP, response to the March 2019 and September 2023 TNOD, the preparation of the Solid Waste Facility Application for the revised Closure and Post Closure Plan, and the submission of a Major Disruption Permit application to construct the CAP. Efforts associated with the submission of the NJDEP DSWM applications and responses to the TNODs include:

- NJDEP DSWM CAP Amendment submission May 5, 2023
- NJDEP DSWM CAP TNOD submission May 5, 2023
- NJDEP DSWM Solid Waste Facility application submission May 5, 2023
- NJDEP DSWM update submission August 30, 2023
- NJDEP DSWM update submission January 17, 2024



This effort resulted in \$26,874.55.

#### B.) PERMIT FINALIZATION / PREPARATION OF SPECIFICATIONS

In addition to the effort above, we spent significant effort coordinating with NJDEP Land Use, Solid Waste and Flood Hazard Departments to coordinate the approval of the project. As you are aware, the NJDEP review is complete, and the permit issuance is anticipated within two weeks.

As a portion of this task, we also began the preparation of the project specifications. This additional effort was not included in our original scope and is required for the bidding of the project. The preparation of the technical specifications was preformed in advance of Municipal approval in preparation of advancing the project to construction. We will finalize the specifications and will provide them to the Municipality for review in combination with Princeton's front-end specifications.

This effort resulted in \$19,500.00.

## C.) <u>CONSTRUCTION ADMINISTRATION / CONSTRUCTION INSPECTION SERVICES</u>

#### TASK C.1 BID PHASE SERVICES

T&M will prepare final contract documents, send publication requests to newspapers identified by the Municipality. As determined by the municipality T&M can provide copies of bid documents to the Municipality for distribution or provide bid documents directly to perspective bidders. T&M will respond to questions from prospective bidders during the bid period, issue addenda as required, assist in conducting the bid opening, review bids, review the qualifications of low bidder, advise the Municipality of our findings, and provide our recommendation.

Following acceptance of the bids by the Municipality, we will notify all bidders of the bid results, return the bid bonds of unsuccessful bidders, and prepare the construction contract for signature by the successful bidder.

#### TASK C.2 CONSTRUCTION PHASE ENGINEERING SERVICES

T&M will provide Construction Administration and Inspection Services on the project. Our goal is always to confirm that the work in in general conformance with the plans, specifications, approved submittals, permit conditions, stipulations and regulations. T&M will communicate actively with Princeton and all entities associated with the project to completion. We will assign roles to personnel that are competent and have the requisite experience, expertise and training.

T&M will provide a Project Manager (PM) responsible for overall onsite performance of our staff and monitoring our work product for compliance with associated regulations, procedures and protocols. We will provide a Resident Engineer (RE), a licensed PE in NJ with a NICET Level IV



certification, who will spend his effort most days providing office support and supervising our daily inspection services. Our proposed Construction Inspector (CI) is a NICET III certified road and highway inspector and holds NJSAT, ACI and OSHA Training certifications. Our CI will be onsite when critical construction operations are being performed.

#### TASK C.3 PROJECT OVERSIGHT & SITE INSPECTION

T&M will provide the following construction inspection and oversight services for this project:

- <u>Site Inspection.</u> T&M site inspector will be on site to ensure work is being completed in accordance with the contract documentation and immediately address any issues that may arise. We will also have a part-time Resident Engineer assigned to provide office support and make site visits as needed. For the purpose of this proposal, we assumed that this project will take 90 days to complete.
- <u>Field Changes</u>. Any major field change must be authorized by Princeton prior to being performed. Any work that varies from the plans needs Princeton's approval, including a reason for the change, cost implications and a revised drawing.
- <u>Materials Testing.</u> The Contractor will be responsible for providing testing services for concrete, asphalt, compaction, etc. as required by Princeton. T&M will oversee the testing in the field and will be available to review the testing reports.
- Pre-Construction & Progress Meetings. T&M will conduct a Pre-Construction Meeting
  and on-site Progress Meetings with the Contractor, Princeton and other personnel
  involved in day-to-day operations to discuss contract progress, schedule updates and any
  other project related issues. Progress Meetings will be conducted on a bi-weekly basis or
  as requested.

#### TASK C.4 CONSTRUCTION CERTIFICATION TO NJDEP DSHW

T&M will prepare a certification letter to the NJDEP, with an accompanying an as-built Site Plan. For this proposal, T&M has assumed that the contractor or their surveyor will provide an as-built drawing in AutoCAD format. These changes will be verified by T&M in the field. The certification to the NJDEP will be prepared to meet the requirements of N.J.A.C. 7:26-2A.9(c)6. The certifying letter and as-built plan will be sign and sealed by a New Jersey licensed Professional Engineer. A copy of the certifying documents will be provided to the municipality.

#### **SCHEDULE OF FEES**

All professional services described in the Additional Work Scope Services provided above are presented and billed on a time and materials basis.

#### A.) LANDFILL CORRECTIVE MEASURES - ADDITIONAL SCOPE OF WORK

The total additional effort to perform these activities is \$224,112.83. Based on our discussion(s), T&M Associates will reduce this fee by \$74,112.83 to a revised total of \$150,000.00 based on the following:



Our backup for this effort (prebill with hours and rates) is attached for your review and approval.

#### B.) PERMIT FINALIZATION / PREPARATION OF SPECIFICATIONS

The total additional effort to preform this task is **\$19,500.00**.

# C.) <u>CONSTRUCTION ADMINISTRATION / CONSTRUCTION INSPECTION SERVICES</u>

The total additional effort to preform this task is \$142,953.00.

### TOTAL Requested Fee: \$312,453.00

We look forward to continuing our professional relationship with Princeton on this project as we are close to obtaining all approvals from the agencies. Please contact us if you have any questions or comments regarding this request.

Very truly yours,

T & M ASSOCIATES

KRISTOPHER J. KRZYSTON

VICE PRESIDENT / NORTHEAST REGIONAL MARKET LEADER

 $G:\Projects\PRIN\00030\Admin\2025-03-13\_PRIN\00030\_Additional\ Services\ -\ FINAL.doc$