September 9, 2008

Mr. Raj Guntnur, P.E.
Public Works and Transportation Engineering Section II
Oak Cliff Municipal Center
320 E. Jefferson Blvd., Room 305
Dallas, Texas 75203

Telephone: (214) 948-4011
Fax: (214) 948-4670

Re: Proposal for Simpkins Site:
   Response to Notice of Violation (NOV) at Elam and South Loop Landfills,
   Land-Use Planning and Development at Simpkins Tracts, and
   Environmental Site Investigation for Related Simpkins Tracts
   South and North of Highway Loop 12 and East of the Trinity River, Dallas, Texas
   Terracon Proposal No. P08941302

Dear Mr. Guntnur:

Terracon Consultants, Inc. (Terracon) appreciates the opportunity to submit this proposal to provide environmental consulting and engineering services at the above-referenced Simpkins Tracts. An outline of the project, Terracon's engineering and environmental consulting scope of services, including schedule, and compensation are provided in the following sections:

A. PROJECT BACKGROUND

The site consists of approximately 1,415 acres of land located along the east bank of the Trinity River to the north and south of Loop 12 in the southeastern portion of Dallas, Dallas County, Texas. The site is currently owned by Metropolitan Sand & Gravel Co., L.L.C.

A.1. REGULATORY AUTHORITITES AND CITY OF DALLAS STAKEHOLDERS

A.1.A TCEQ SOLID WASTE SECTION
The Texas State Department of Health issued Municipal Solid Waste (MSW) Permit No. 88 on August 29, 1975 to operate the Elam and South Loop Landfills. The total permitted area for MSW No. 88 is approximately 340 acres. The permitted Elam Landfill occupies approximately 85 acres of land on the north side of Highway Loop 12. The Elam Landfill includes an unfilled area north of Elam Road and an approximate 5 acre unfilled area on neighboring property to the east of the Site. The permit application indicated that there were three additional landfill areas south, west, and northwest of the permitted Elam Landfill comprising approximately 30 acres, which were filled prior to the March 1975 permit application, and are not included in the permit. The permitted South Loop Landfill occupies approximately 255 acres of land on the south side of Highway Loop 12.

The site consisted primarily of undeveloped and agricultural land in the 1940s, prior to portions of the site being utilized for sand and gravel mining operations in the 1950s and 1960s. Based on a review of aerial photographs, approximately 160 acres or more have been used for gravel mining operations. In the late 1950s and early 1960s, it appears that landfilling operations began on-site. The Elam Landfill operated from approximately 1957 until closure in 1980, and the South Loop Landfill operated from approximately 1962 until closure in 1983.

The TCEQ Central Registry lists the South Loop 12 Landfill as Regulated Entity No. RN101665743, and lists the City of Dallas (CN600331730) as Operator and Metropolitan Sand & Gravel (CN600898811) as Owner. The South Loop 12 Landfill is recorded at 6000 E. South Loop 12, Dallas, TX, 75217, and is recorded to be in the Municipal Solid Waste Disposal Program (Permit No. 88).

The TCEQ Central Registry lists the Closed Elam Road Landfill as Regulated Entity No. RN104990460, and lists Metropolitan Sand & Gravel (CN600898811) as Owner. The Closed Elam Road Landfill is recorded at 5920 Elam Road, Dallas, TX 75217, and is recorded to be in the Municipal Solid Waste Non Permitted Program (ID No. 455040167).

The TCEQ Solid Waste Section issued an Amended Notice of Violation for the Closed South Loop Landfill on August 21, 2006.

A.1.B TCEQ VOLUNTARY CLEANUP PROGRAM
The City of Dallas intends to enroll the Simpkins Tracts in the Voluntary Cleanup Program (VCP). This proposal includes the environmental consulting support services and the $1,000.00 Application fee associated with the enrollment of the non-capped areas of the Simpkins site into the VCP prior to its acquisition. The capped areas of the Simpkins site are currently subject to an NOV, and would not be initially included in the VCP. Following the closure of the NOV by the TCEQ Solid Waste Section, the City of Dallas enrolled the capped areas into the VCP on July 31, 2008 (included in these proposed activities). The City of Dallas intends to acquire
additional property east of the Elam Landfill and west of Pemberton Hill Road, which the City of Dallas may enroll in the VCP.

A.2. RESPONSE TO NOTICE OF VIOLATION FOR LANDFILL CAPS

Terracon prepared the *Methane and Landfill Cap Evaluation and Proposed Response Actions* report, dated January 30, 2008, for the South Loop and Elam Landfills, which was submitted to the Texas Commission on Environmental Quality (TCEQ) on January 31, 2008. Based on the findings of this investigation, surface waste and exposed waste were identified on the capped areas. In addition, some borings installed on the capped areas encountered less than 2 feet of earthen cover and side slope problems were observed on portions of the South Loop Landfill. Limited ponding was observed on the capped areas during this investigation and in aerial photographs depicting the site. The presence of exposed waste and possible surface waste was observed along the bank of Pond J. In addition, although no methane was detected in hand augured soil gas probes installed on the east side of the drainage swale near the property boundary, concentrations of methane were observed to exceed 5% methane in 3 of the 7 soil gas probes constructed between the Elam Landfill and the north-south drainage swale that exists within the landfill permit boundary.

Based on these findings, Terracon recommended that prior to removal, the surface waste should be investigated to confirm it is not exposed landfill waste and the volume of surface waste should be estimated and subsequently removed. The landfill cap should be restored near waste removal areas and seeded to promote vegetated growth. The area of exposed waste within the capped areas should be capped with a minimum of 2 feet of cover and seeded to promote vegetative growth. An additional evaluation is needed to evaluate the occurrence of waste in the vicinity of Pond J, and an engineered response action should be performed to address the visible waste. The landfill cap should be restored near the eroded side slope on the South Loop Landfill, and the slope should be reduced or an engineering control should be implemented to mitigate potential side slope problems. In areas where the landfill cap exhibited less than 2 feet of cover, the capped area surrounding the boring should be evaluated for functionality. The areas that are susceptible to ponding should be filled and graded to prevent excessive ponding on the landfill cap, and then seeded to promote vegetative growth. Based on the initial methane monitoring along the property boundary, it does not appear that methane migrates across the permit boundary in excess of the 5% regulatory limit. In accordance with TCEQ’s comment letter dated March 26, 2008, monitoring of the soil gas probes along the east side of the closed Elam Landfill shall be conducted at a frequency of at least once every three months until March 1, 2009, and during or following low pressure atmospheric conditions.

In a facsimile dated March 26, 2008, the TCEQ approved the proposed action plan, in conjunction with the facsimile transmitted February 19, 2008, with the following conditions:

- In order to provide the TCEQ the opportunity to observe the landfill gas probe monitoring and remediation activities, it is requested that the City of Dallas and Metropolitan Sand &
Gravel, LLC provide ten working days notice to the Region 4 office prior to conducting on-site remediation activities.

- It is requested that the City of Dallas and Metropolitan Sand & Gravel, LLC conduct methane monitoring of the soil gas probes located on the eastside of the closed Elam landfill at least once every three months until March 1, 2009. It is also requested that the methane monitoring be conducted during or following low pressure atmospheric conditions. The TCEQ acknowledges there may be difficulty associated with scheduling a monitoring event based on weather conditions ten working days in advance; therefore Terracon understands that the TCEQ will work with both parties regarding the ten day notice and the scheduling of soil gas probe monitoring.

- It is requested the earthen materials to be utilized to repair the landfill final cover system meet the requirements of 30 TAC 330.453.

- The stained areas observed at the South Loop Landfill and identified in the Evaluation and Response Action Plan should be monitored at least once every three months until March 1, 2009. If leachate seeps or the lack of vegetative growth are observed, then the area final cover should be restored and re-vegetated.

A.3. RESULTS OF LIMITED SITE INVESTIGATION FOR NON-CAPPED AREAS

Terracon prepared a Limited Site Investigation (LSI) report, draft dated January 8, 2008, for the Simpkins Tracts - South Loop and Elam Landfills, and submitted the report to the City of Dallas Office of Environmental Quality and the City Attorney’s office for review in draft format on January 8, 2008.

Surface and Subsurface Soil

Based on the findings of the LSI, waste (including paper, plastic, glass and/or rusted metal) was observed in various soil borings installed on the site, indicating buried waste located outside the known landfill areas in the vicinity of the assessed areas. Based on the analytical results of soil samples collected at the site, total petroleum hydrocarbons (TPH), semi-volatile organic compounds (SVOCs), pesticides, and herbicide were not detected above the applicable Texas Risk Reduction Program (TRRP) Tier 1 Residential Critical Protective Concentration Levels (PCLs). On-site soils collected from three soil borings exhibited relatively low concentrations of volatile organic compounds (VOCs) that were below applicable Tier 1 Residential Critical PCLs. Additionally, various metals were detected in the on-site soils. On-site soils exhibited concentrations of arsenic, cadmium, lead, silver, and thallium above the applicable TRRP Tier 1 Critical PCLs, Texas-specific background concentrations, and/or site-specific background concentrations. Further evaluation indicated the metals concentration detected in soil were either protective of groundwater, below site-specific background concentrations, or below calculated site-specific Tier 2 PCLs.
Groundwater
Based on laboratory analysis, a VOC compound, chlorobenzene, was detected in the groundwater samples collected at the site at concentrations below the applicable TRRP Tier 1 Critical PCL. Additionally, SVOC compounds, and a pesticide compound gamma-BHC were detected above the laboratory SQL but below the applicable Tier 1 Residential Critical PCLs during the 2007 LSI. Based on laboratory analysis, groundwater samples collected from on-site monitoring wells did not exhibit metals at concentrations above the laboratory SQLs and/or applicable TRRP Tier 1 Critical PCLs.

Surface Water
Based on laboratory analysis of surface water and seep samples collected at site during the 2007 LSI, VOCs, TPH, pesticides, herbicides, and PCBs were not detected above laboratory SQLs. Two seep samples collected at the site exhibited SVOC compounds, di-n-butyl phthalate and bis (2-ethyl-hexyl) phthalate (possible laboratory contaminant), above the laboratory SQL, but below the applicable Tier 1 Residential Critical PCL. Additionally, VOCs, SVOCs, TPH, pesticides, and herbicides were identified in the surface water samples collected in 2005 as part of the Limited Solid Waste Evaluation Report (dated October 12, 2005).

Sediment
Based on laboratory analysis of sediment samples collected at the site, VOCs, TPH, pesticides, herbicides, and SVOCs were not detected in the sediment samples at concentrations above laboratory SQLs. Analytical results indicated various metals were detected in sediment samples; however, the metals concentrations were below Ecological Benchmarks for Sediment, Second Effects Levels for Sediment, and TRRP Tier 1 Sediment PCLs.

Based on these findings, Terracon recommended that the extent and thickness of the waste should be evaluated and the waste located outside of the designated/permitted landfill areas should be excavated from the site and disposed at an approved facility. Based on the metals analytical results and limited spatial assessment of soil across the site, additional investigation to evaluate the magnitude and extent of lead in surface soils in the vicinity of MW-Q17 and in the area southwest of the South Loop Landfill in the vicinity of B-V9, B-W5 and MW-W8, appears warranted at this time. Due to the distribution of chlorobenzene, absence of information regarding a potential source, and relatively limited spatial assessment of groundwater across the site, additional evaluation of the magnitude and extent of VOCs in groundwater appears warranted at this time. Since the on-site ponds and seeps may be subject to periodic flooding from the Trinity River, surface water conditions may vary over time. Therefore, additional assessment of surface water may be necessary to further evaluate the presence of COCs in surface water on the site.

General Site Considerations
Concentrations of metals detected at the site exceeded applicable PCLs/benchmarks in soil and surface water. Based on a review of current site data for soil, groundwater, sediment, and surface water, additional evaluation of metals appears warranted to assess whether metals and
other COCs are a result of natural and/or anthropogenic events or activities (i.e., Trinity River flooding, non-native fill material) or a result of releases from potential on-site sources areas.

B. SCOPE OF SERVICES

Based on the findings of previous site investigations, and at the direction of the City of Dallas, this project includes the following two Tasks:

**TASK 1 – INVESTIGATION**

**Response to NOV Capped Areas of Simpkins Tracts**
- TCEQ-directed compliance methane monitoring at Elam Landfill and observation of stained areas at South Loop Landfill,
- Survey of metes and bounds of Simpkins tracts and deed recorded limits of solid waste,
- Survey of landfill topography, and
- Assessment of Pond J, apparent surface waste, and cap functionality.

**Additional Investigations to Support Site Development and the Affected Property Assessment Report (APAR)**
- Assessment of subsurface methane concentrations on selected interior portions of the Simpkins Site.
- Additional surface waste and subsurface waste investigation, and
- Additional soil, groundwater, and surface water investigations to supplement the findings of the draft LSI dated January 8, 2008.

**TASK 2 – REMEDIATION DESIGN**

**Response to NOV Capped Areas of Simpkins Tracts**
- Preparation of 30%, 60%, and 95% designs for landfill restoration,
- Preparation of Pre-Construction Notification (PCN) to USACE,
- Meetings and communication with the City of Dallas and regulatory authorities, and
- Bidding assistance.

**Development and Waste Removal Activities for Simpkins Tracts**
- MSW permit modification of non-capped areas of the Elam Landfill
- Assessment of land-use restrictions and 10% design for vehicular and bicycle paths across South Loop and Elam Landfills,
- Assessment and design for the development and enhancement of wetlands adjacent to landfills,
- Design of surface waste and subsurface waste removal from non-capped areas and site restoration,
- Meetings and communication with the City of Dallas and regulatory authorities, and
- Bidding assistance.
Regulatory Interaction and Reporting for Non-Capped Areas of Simpkins Tracts

- Assist City of Dallas to enroll the non-capped areas of the Simpkins tracts in the VCP,
- Preparation of Affect Property Assessment Report (APAR), and
- Meetings and communication with the City of Dallas and regulatory authorities.

NOTE: This proposal does not include response action costs associated with soil, groundwater, surface water, or sediment mitigation. Additionally, Terracon assumes that construction contractors and fees associated with the removal of surface and subsurface waste materials identified outside the capped areas will be billed directly to the City of Dallas subsequent to the completion of a formal bidding process. The preparation of a Response Action Plan (RAP) and Response Action Completion Report (RACR), and TCEQ interaction subsequent to the approval of an APAR are not included in this proposal. These costs, and costs associated with implementation of response action will be presented to the City of Dallas for approval, upon request.

Additionally, costs associated with ecological risk assessments are not included in this proposal. Subsequent to the completion of the proposed investigation activities presented herein, and upon request from the City of Dallas, Terracon will prepare a proposal to address these out-of-scope items, if required.

Terracon assumes that all construction contractors and fees, to be determined subsequent to the completion of this scope of work, will be billed directly to the City of Dallas subsequent to the completion of a formal bidding process.

B.1 TASK 1 – INVESTIGATION

Response to NOV for Capped Areas of Simpkins Tracts

B.1.A Methane Monitoring at the Elam Landfill

Terracon will monitor the thirteen soil gas probes on the east side of the Elam Landfill at least once every three months, beginning immediately upon notification to proceed and concluding in March 2009 (assumes four quarters). The probes include the seven soil gas probes (SGP-1, SGP-2, SGP-3, SGP-5, SGP-6, SGP-7, and SGP-8) located on the west side of the drainage swale and the six probes (SGP-2a, SGP-3a, SGP-4a, SGP-5a, SGP-6a, and SGP-7a) located on the east of the drainage swale. Given TCEQ's request to sample the probes following low pressure atmospheric conditions, Terracon will budget two monitoring events every three months, but will conduct sampling in compliance with TCEQ's request. Terracon will notify the City of Dallas and the TCEQ Region 4 Waste Section Manager 10 days in advance of scheduled methane monitoring activities. When monitoring is conducted in conjunction with unanticipated low pressure atmospheric conditions, Terracon will notify the City and the TCEQ.
in advance of monitoring at the earliest practicable time. Terracon will prepare a quarterly methane monitoring report for submission to the TCEQ.

B.1.B Observation of Stained Areas at South Loop Landfill
As requested by the TCEQ, Terracon will observe the stained areas of the landfill cap at least every three months, beginning immediately upon notification to proceed and concluding in March 2009 (assumes four quarters). Terracon will visually observe the stained areas for water, evidence of ponded water, stressed vegetation, bacterial growth, and staining. Terracon will visit the site at regularly scheduled quarterly intervals, and will attempt additional trips after storm events provided the site is physically accessible. Terracon will prepare a quarterly observation report for submission to the TCEQ.

B.1.C Survey of Metes and Bounds of Property and Waste Limits and Topography of the Capped Areas
A registered professional land surveyor (RPLS) will be contracted to survey the landfill capped areas. For the purpose of this proposal, Terracon will subcontract Pacheco Koch to perform the survey. Pacheco Koch is currently contracted through BRW Architects, Inc. to provide surveying services for the proposed City of Dallas’ Texas Horse Park development, which is immediately north of the Elam Landfill. Pacheco Koch has already surveyed portions of the Elam Landfill, which can be used for this proposal. Terracon assumes that the City of Dallas and BRW Architects will permit Pacheco Koch to share survey information pertinent to this proposal with Terracon. This will permit a continuity of survey products and prevent duplicity of effort. The estimated survey costs assume that Terracon will be provided access to aerial surveys that may include pertinent information for the evaluation of borrow sources in the site vicinity.

The survey will include:

- The surveyor will locate Tract No. 1, Tract No. 2, and the Description of Landfill Boundary as identified in the Affidavit to the Public filed in the deed records, dated May 6, 1982, for the Elam Landfill. The surveyor will locate the Description of the Property Boundary and the Description of the Landfill Boundary (Tract No. 1 and Tract No. 2) as identified in the Affidavit to the Public filed in the deed records, dated June 18, 1984, for the South Loop Landfill. The surveyor will designate the limits of any Special Flood Hazard Area depicted on the most recent Flood Insurance Map (FIRM), published by Federal Emergency Management Agency (FEMA).

- The South Loop Landfill, the Elam Landfill, and the pre-permitted fill areas south and west of the Elam Landfill will be surveyed for topography. The survey will provide the topography of the landfill. Pacheco Koch conducted a recent aerial photogrammetric survey of the Elam Landfill, north of Highway Loop 12 and east of the Dallas Power & Light easement. The surveyor will subcontract with Dallas Aerial Surveys, Inc. to conduct an aerial photogrammetric survey of the South Loop Landfill. Photogrammetric
surveys may achieve 0.3-foot accuracy, and meet national map accuracy standards. The surveyor will measure the topography of the Elam Landfill west of the Dallas Power & Light easement using a total station or GPS receiver. The surveyor will provide a topographic survey to the limits of solid waste with 1-foot topographic contours.

- The waste limits of the fill area northwest of the Elam Landfill will be determined from the waste limits recorded in the deed records. The surveyor will measure the size and surrounding topography of the large apparent surface waste area on the south side of the fill area and confirm whether the apparent surface waste is within the recorded waste limits of the fill area. The surveyor will provide locations, common name, and trunk diameter of trees greater than 8 inches in diameter or the outline of heavily wooded areas.

- The location, extent, gradient, and surrounding topography of the eroded side slope and active seeps will be measured for the approximately 500-foot long side slope on the south side of the South Loop Landfill northwest of Pond S. The surveyor will provide locations, common name, and trunk diameter of trees greater than 8 inches in diameter or the outline of heavily wooded areas.

- The surrounding topography and location and extents of solid waste will be measured for the banks of Pond J. The survey will also include the subsurface topography of the pond, the location of the investigation borings, the location of the drainage feature on the south side of Pond J, and the identification of the discharges paths from the drainage feature and Pond J to their nexus. The surveyor will provide locations, common name, and trunk diameter of trees greater than 8 inches in diameter or the outline of heavily wooded areas.

The survey will be scheduled upon client notice to proceed. The surveyor is anticipated to initiate the topographical survey within 1 week of the notification to proceed, and the topographic survey is anticipated to take 3 weeks. An additional week is anticipated for the preparation of the deliverable. The remaining surveying tasks are assumed to be performed concurrently, but have the same deliverable schedule. Thus, the surveying task is assumed to require 5 weeks after the notification to proceed.

**B.1.D Investigation of Pond J**

The *Methane and Landfill Cap Evaluation and Proposed Response Actions* report (January 30, 2008) suggests that the approximate 1.8-acre Pond J may require partial draining (if necessary) to facilitate additional assessment. Because the dewatering of the pond is potentially subject to regulation by the Corps of Engineers under Section 404 of the Clean Water Act, and because of the consequential lengthy permitting process, Terracon recommends that the limits of solid waste at Pond J be evaluated using conventional means without lowering the water level.
Terracon visited Pond J to preliminarily assess its status as a “water of the United States” and a wetland. During this visit, the water level was lower than previously encountered, and additional solid waste was observed along its banks. A band of solid waste, approximately 1 foot in thickness, was observed to extend along most of the southern bank of Pond J. The depth of Pond J is unknown.

The nature and extent of solid waste will be visually examined along the banks of Pond J. Terracon will install hand-augured borings through the banks and sediment of Pond J, and will examine the cuttings for the presence of waste material. The borings will be stepped out from the bank of Pond J, as needed and as feasible, to determine extent of solid waste. The borings will be installed by personnel wading into the pond and/or sitting in a low-profile water craft. The borings will be attempted to a maximum depth of 4 feet below grade. The borings above the water line will be filled with native fill material. Any waste material removed from the borings will be containerized in 55-gallon drums and disposed appropriately.

The limits and quantity of solid waste will be examined on the south side of Pond J. The deed recorded waste limits extend on the south side of Pond J, and the area is overgrown with mature trees. This area was not accessible for the purposes of the Methane and Landfill Cap Evaluation and Proposed Response Actions (January 30, 2008) investigation. A drainage area is located approximately 100 feet south of Pond J, and the area between Pond J and the drainage area is presumed to contain solid waste. Depending on physical access, a truck- or track-mounted hydraulic push rig will utilized to advance up to four (4) soil borings along the edge of the drainage area and four (4) soil borings between Pond J and the drainage area. The borings will be attempted to 2 feet below the limit of solid waste, if encountered or auger refusal. Upon completion, the soil borings will be filled with soil cuttings to 2 feet below the surface, and the final 2 feet of the borings will be filled with bentonite chips.

Terracon will assist the City of Dallas in assessing whether Pond J and the drainage feature to its south meet the statutory definition of a “water of the United States.” Terracon will evaluate the hydrology, soils, and vegetation at Pond J and the drainage feature to its south to assess their potential classification as a wetland. Terracon will provide a recommendation to the City of Dallas with regards to the classification of the water bodies, and will provide technical support during City of Dallas meeting with the USACE.

As part of the evaluation of Pond J, Terracon will collect a surface water sample from Pond J and analyze the sample for the parameters specified in 40 CFR 122 Appendix D Tables II, III, and V (toxic pollutants) and additional conventional and non-conventional pollutants listed in the City of Dallas storm water analytical sweep list.

The exploratory assessment within Pond J will begin within 2 weeks of the notification to proceed. Terracon estimates that 2 to 3 weeks will be required to complete the exploratory assessment associated with Pond J and south of Pond J.
B.1.E Characterization of Apparent Surface Waste on Capped Areas

Terracon will locate and measure the extents of the waste areas, eroded areas, and non-vegetated areas on the capped areas using a Trimble GeoXH GPS receiver. The specified GPS measurements have a horizontal accuracy of less than 1 foot. The recorded locations will be integrated with the topographic map to facilitate the restoration design. Terracon will use an all-terrain vehicle (ATV) to facilitate the GPS survey.

The areas identified in the *Methane and Landfill Cap Evaluation and Proposed Response Actions* report (January 30, 2008) will be further investigated to evaluate whether the waste on the capped areas is surface waste or exposed waste. A truck- or track-mounted hydraulic push rig will be used to install exploratory soil borings adjacent to the apparent surface waste and the soil samples/cuttings will be evaluated to assess whether landfill cover exists between apparent surface waste and the underlying capped waste. The thickness of the cap and the differences in the surface waste and capped waste will be documented. Any waste material removed from the borings will be containerized in 55-gallon drums and disposed appropriately. The borings will be filled with soil cuttings to 2 feet below the surface, and the final 2 feet of the borings will be filled with bentonite chips. The volume of surface waste will be estimated using the GPS and boring results.

Subsequent to the City of Dallas' notification to proceed, Terracon will schedule the drilling subcontractor and complete the assessment within 2 to 3 weeks. The field investigation for this task is anticipated to take 5 days.

B.1.F Evaluation of Cap Functionality

As part of the *Methane and Landfill Cap Evaluation and Proposed Response Actions* report (January 30, 2008), the thickness of the South Loop and Elam landfill caps were assessed by installing 170 soil borings through the cap on an approximate 250-foot by 250-foot grid. Eight (8) of the borings at the Elam Landfill and adjacent fill areas and 33 of the borings at the South Loop Landfill encountered less than 2 feet of cap. Based on the findings of the previous assessment activities, the capped areas where soil borings encountered less than 2 feet of cap will be further evaluated for functionality. The cap evaluation will consist of a visual assessment of the cap for ponding, stressed or lacking vegetation, erosion, cracking, stained soils, and exposed waste. The vegetation growth will be evaluated using a representative number of yard square assessments of the cap per TCEQ guidelines. The drainage pattern will be observed in the area for proper storm water routing and management.

Terracon will begin evaluating the cap functionality following the characterization of the apparent surface waste. The evaluation is anticipated to take 5 days.
B.1.G Assessment of Subsurface Methane Concentrations on Interior of Simpkins Site

At the request of the City of Dallas, Terracon will perform an additional evaluation of subsurface methane concentrations on the interior portions of the Site. The objective of the additional methane evaluation is to assess the magnitude and extent of subsurface methane concentrations on the interior portions of the Site related to proposed future uses of the Site by the City of Dallas Parks and Recreation Department.

For the purpose of this proposal and estimated costs associated with evaluation of methane in these areas, up to fifty (50) soil gas probes will be installed on the interior portions of the Site, proximate to buried waste areas and/or proposed future land use areas. The probes will be installed under the supervision of a State of Texas licensed well driller utilizing a track-mounted drilling rig equipped with solid flight augers. The probes will be advanced to maximum depths ranging from 10 to 30 feet bgs, and will be terminated into bedrock or groundwater, whichever is encountered first. The probes will generally be completed as follows:

- Installation of approximately 5 to 25 feet (depending on probe total depth) of 1-inch diameter, machine-slotted PVC well screen assembly with a threaded bottom plug;
- Installation of approximately 5 feet of riser pipe to the surface;
- Addition of graded silica sand for annular sand pack around well screen from bottom of the probe to one foot above the top of screen;
- Addition of cement/bentonite slurry to the surface; and
- Installation of a locking well cap and flush-mount concrete-pad completion.

Following installation, the soil gas probes will be monitored on a bi-weekly basis for a period of approximately two months. The probes will be monitored using a landfill gas meter capable of measuring methane, carbon dioxide, oxygen, and balance gas at percent concentrations. In addition to soil gas readings, the landfill gas meter will be used to record ambient methane concentrations at the ground surface at each of the sampling locations.

Verbal results of the methane monitoring events will be provided to the City of Dallas after completion of each event, and the findings presented in a final report to the City of Dallas.

B.1.H Additional Waste Investigation

Buried Waste

The extent and thickness of the waste located outside of designated/permitted landfill areas (areas not subject to the current NOV) will be evaluated to further characterize the areas to assist in eventual excavation of the areas and disposal of the buried wastes at an approved facility.
Approximately forty (40) exploratory soil borings will be advanced on the site to delineate buried waste in the vicinity of borings B-O4, B-N4A, B-N4B, B-N4C, B-L4, and B-U7. The borings will be advanced utilizing ATV-mounted direct-push drilling equipment under the supervision of a State of Texas licensed water well driller. The boring will be advanced to a maximum depth of 16 feet bgs, or until the vertical limit of buried waste is observed. Soil/buried waste samples will be collected continuously using core-barrel samplers to document waste type and extent, lithology, color, relative moisture content, and visual or olfactory evidence of impact. In addition, the samples collected from the exploratory borings will be scanned with a PID for the presence of VOCs. The horizontal limits of the identified waste will be subsequently surveyed using Trimble GeoXH GPS receiver to later assist in waste volume characterization.

It should be noted that, due to limited information available on the extent of buried wastes located outside of the capped areas, Terracon is unable to provide accurate estimates of the amount of buried wastes that will require removal and disposal. Likewise, conceptual costs for removal and disposal of buried wastes located outside of the capped area are not included in this proposal. Characterization of the buried wastes will provide the information necessary to provide these estimates at a later date.

Surface Waste
Terracon will locate previously identified surface waste and will identify and locate additional surface waste discovered in the non-capped areas of the Simpkins Site. The horizontal limits of the identified waste will be subsequently surveyed using Trimble GeoXH GPS receiver to later assist in waste volume characterization. The thickness of the waste will be non-invasively estimated.

B.1.1 Additional Soil and Groundwater Investigation

Installation of Soil Borings and Monitoring Wells

Seven (7) soil borings converted into permanent groundwater monitoring wells will be installed on the site to further evaluate the presence of chemicals of concern in soil and groundwater at the Site. Two monitoring wells are proposed in the vicinity of MW-M10, two wells are proposed in the vicinity of MW-06, and three wells are proposed in the vicinity of MW-U15. An additional nine (9) soil borings will be drilled in the vicinity of B-L4, MW-P21, and MW-U22 to further evaluate soil. Three soil borings are proposed in the vicinity of MW-U22, two soil borings are proposed in the vicinity of MW-P21, and four soil borings are proposed in the vicinity of B-L4. In addition, forty-five (45) shallow soil samples will be collected (nine [9] samples in the vicinity of each soil boring/monitoring well MW-Q17, B-V7, B-V9, B-W5, and MW-W8) to further evaluate lead in surface soil.

The proposed soil borings will be installed on-site using a track-mounted hollow-stem auger drilling rig or ATV-mounted direct-push technology drilling equipment under the supervision of a State of Texas licensed well driller. The soil borings to be converted to monitoring wells will be advanced to approximate depths ranging from 20 to 30 feet bgs, 5 feet into groundwater, or refusal, whichever occurs first. The remaining soil borings will be advanced to a maximum depth of approximately
16 feet bgs. Shallow soil samples will be collected by a Terracon environmental scientist using a hand auger. Hand auger borings will be advanced to a maximum depth of 4 feet bgs.

Following completion of sampling activities, borings not converted to monitoring wells will be closed in place in accordance with applicable state regulations and guidelines. In the event there are no applicable state regulations or guidelines, the wells to be closed will be backfilled with bentonite pellets, then hydrated and grouted to the surface.

Soil samples will be collected continuously using a hand auger, or core barrel, split spoon, or Shelby tube samplers to document lithology, color, relative moisture content, and visual or olfactory evidence of petroleum hydrocarbons. In addition, the samples collected from the soil borings will be scanned with a photoionization detector (PID) for the presence of VOCs.

Prior to commencement of the project and following the installation of each soil boring, the sampling and drilling equipment will be decontaminated by high pressure cleaning. Drill cuttings will be stored temporarily on-site in labeled, 55-gallon, DOT-approved drums in accordance with applicable regulations pending the results of the laboratory analyses. The drum labels will bear the apparent contents of the drum and the accumulation date. Upon completion of the investigation, the drill cuttings will be disposed in accordance with applicable regulations.

Groundwater monitoring wells will be completed according to standard industry practices, and actual monitoring well construction will vary depending on first occurrence of groundwater and total depth of the monitoring well. The monitoring wells will be developed by surging and removing groundwater until fluids appear relatively free of fine-grained sediment. Drill cuttings and development groundwater will be stored temporarily on-site in labeled 55-gallon drums pending the results of the laboratory analyses. The drum labels will identify the apparent contents of the drum and the initial accumulation date.

Following development of the monitoring wells and prior to groundwater sample collection, each well will be purged with low-flow sampling equipment until consistent values (i.e., less than 10% variance between consecutive readings) are obtained for pH, temperature, and conductivity. Subsequent to parameter stabilization, one groundwater sample will be collected from each monitoring well using low-flow sampling equipment. Groundwater samples will be collected from the seven (7) soil borings converted into permanent groundwater monitoring wells and five (5) of the previously installed groundwater monitoring wells (MW-M10, MWO6, MWU8, MW-V12 and MW-U15) to further evaluate groundwater on the site.

In order to evaluate groundwater flow direction, the top of casing of the monitoring wells will be surveyed relative to a City of Dallas benchmark elevation near the site. The groundwater levels will be gauged in each monitoring well to assist in evaluation of the direction of groundwater flow. The corrected groundwater elevations will be used to construct a groundwater flow direction map.
Environmental Media Sampling Program

Terracon's environmental media sampling program will consist of the following:

- Collection of one or more selected samples from the soil borings at the surface, the zone exhibiting the highest concentration of VOCs based on visual and olfactory evidence and/or PID readings, from the bottom of observed fill material (if encountered), from the capillary fringe zone, from the interval above bedrock, from the bottom of the boring, or from the interval of most likely environmental impact as determined in the field by the sampling professional. A total of 2 to 3 soil samples will be collected from each soil boring (based on the above criteria) for laboratory analysis;
- Collection of surface water samples from selected on-site seeps; and
- Collection of one groundwater sample from each of twelve (12) monitoring wells using low flow sampling equipment following purging.

Soil, groundwater, and surface water samples will be collected in pre-cleaned glassware and placed on ice in a cooler which will be sealed with custody tape. The samples will be transported to a selected, NELAC-accredited analytical laboratory along with a completed chain-of-custody form.

Environmental Laboratory Analytical Program

Selected samples collected at the site will be analyzed for VOCs by EPA Method SW-846 #8260B, semi-volatile organic compounds (SVOCs) by EPA Method SW-846 #8270C, pesticides by EPA Methods SW-846 #8081/8141, herbicides by EPA Method SW-846 #8151, RCRA 8 Metals (or Priority Pollutant metals including vanadium, barium, and cobalt) by EPA Method SW-846 #6010/7000, and pH by EPA Method SW-846 #9045C.

For quality assurance/quality control (QA/QC) purposes, duplicate samples will be collected and analyzed for VOCs for each sampled media at an approximate frequency of 10 percent. In addition, a QC field blank sample will be collected and analyzed for VOCs.

The following general criteria will be used for the selection of analysis of sampled media:

- Previously reported analytical data for each location and sampled media;
- Soil samples exhibiting elevated PID readings – analysis for presence of VOCs;
- Non-native fill areas identified during sampling – analysis for presence of VOCs, SVOCs, and metals (in addition, pesticides and herbicides will be collected at shallow intervals of non-native fill areas);
- Surface soil areas – analysis for presence of metals;
- Groundwater samples – analysis for presence of VOCs and metals (pesticides and herbicides will be analyzed in the vicinity of wells MW-06 and MW-Q17);
- Surface water samples – analysis for presence of VOCs, SVOCs, metals, pesticides, herbicides, and geochemical parameters;
The following table summarizes the estimated number of samples and the analytical methods:

<table>
<thead>
<tr>
<th>ANALYSIS</th>
<th>NO. OF SAMPLES</th>
<th>METHOD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Soil Samples</td>
<td></td>
<td></td>
</tr>
<tr>
<td>*VOCs</td>
<td>10</td>
<td>SW-846 #8260</td>
</tr>
<tr>
<td>SVOCs</td>
<td>2</td>
<td>SW-846 #8270</td>
</tr>
<tr>
<td>Pesticides/Herbicides</td>
<td>2</td>
<td>SW-846 #8081, #8141, #8151A</td>
</tr>
<tr>
<td>Metals – Thallium (4)</td>
<td>49</td>
<td>SW-846 #6020</td>
</tr>
<tr>
<td>Lead (45)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>pH (Corrosivity)</td>
<td>6</td>
<td>SW-846 #9045C/9040B</td>
</tr>
<tr>
<td>Dry Weight</td>
<td>61</td>
<td>SM 2540G</td>
</tr>
</tbody>
</table>

Groundwater Samples – Collected from 12 Monitoring Wells

<table>
<thead>
<tr>
<th>ANALYSIS</th>
<th>NO. OF SAMPLES</th>
<th>METHOD</th>
</tr>
</thead>
<tbody>
<tr>
<td>*VOCs</td>
<td>10</td>
<td>SW-846 #8260</td>
</tr>
<tr>
<td>Pesticides/Herbicides</td>
<td>7</td>
<td>SW-846 #8081, #8141, #8151A</td>
</tr>
<tr>
<td>Metals – Thallium (1)</td>
<td>2</td>
<td>SW-846 #6010/7471, pH - SW-846 #9045C</td>
</tr>
<tr>
<td>Lead (1)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Surface Water Assessment Samples – 4 Quarterly Sampling Events on 2 Seeps and 2 On-Site Monitoring Wells (16 Samples Total)

<table>
<thead>
<tr>
<th>ANALYSIS</th>
<th>NO. OF SAMPLES</th>
<th>METHOD</th>
</tr>
</thead>
<tbody>
<tr>
<td>*VOCs</td>
<td>16</td>
<td>SW-846 #8260</td>
</tr>
<tr>
<td>SVOCs</td>
<td>16</td>
<td>SW-846 #8270</td>
</tr>
<tr>
<td>Pesticides/Herbicides</td>
<td>16</td>
<td>SW-846 #8081, #8141, #8151A</td>
</tr>
<tr>
<td>RCRA 8 or Priority Pollutant</td>
<td>16</td>
<td>SW-846 #6010/7471, pH - SW-846 #9045C</td>
</tr>
<tr>
<td>Metals with Vn, Ba and Co</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Geochemical parameters</td>
<td>24</td>
<td>Varies</td>
</tr>
</tbody>
</table>

* Will include QA/QC Sampling on approximately 10% of the analytical samples.

**B.1.J Additional Surface Water Investigation**

Since the on-site ponds and seeps may be subject to periodic flooding from the Trinity River, surface water and groundwater conditions may vary over time. Therefore, additional assessment of surface water is recommended to further evaluate the presences of COCs in surface water on the site and to evaluate the site hydrology over time.

Terracon proposes four quarterly monitoring events to assess the surface water seeps and upgradient groundwater, and to gather additional data relating to the Site hydrology over the course of one year. Terracon proposes collecting initial water samples to determine geochemical data from select wells, seeps, and river water. Following the initial collection of water samples, Terracon proposes quarterly sampling of two (2) seeps entering the Trinity River and two (2) upgradient groundwater monitoring wells. During each quarterly event, select wells north of Highway Loop 12 will also be gauged in order to observe the groundwater gradient over time.
TASK 2 – REMEDIATION DESIGN

Response to NOV Capped Areas of Simpkins Tracts

B.2.A Design of Landfill Cover Restoration at Simpkins Site

Terracon intends to use a staged approach for the designs for the restoration of the landfill cover. The stages of design are described as follows:

- The 30% design phase will include the designation of use, proposed layout, proposed standards, design calculations, and cut-and-fill calculations. The 30 percent design is intended to be reviewed by the City of Dallas and the regulatory authorities.

- The 60% design phase will be revised based on City of Dallas and regulatory feedback. The 60% design will use established design standards, and will provide a revised layout, revised cut-and-fill calculations, grading plan and notes, special details and ground profiles, and erosion control plans.

- The 95% design phase will be revised based on the City of Dallas’ review of the 60% design and recommendations. The 95% design will include a single submission of the specifications. The 95% design is intended as a bid-design for the project.

The 30% design will provide the estimated volume of surface waste and landfill waste to remove from the landfills, and will provide the estimated area of cap to be restored and the type and volume of borrow soils required. The design will address NOV issues, including:

- Restoration of the cap over areas of exposed waste,
- Restoration of the cap disturbed by the removal of surface waste,
- Restoration of the side slope on the south side of the South Loop Landfill,
- Restoration of the landfill cap at Pond J,
- Restoration of the landfill cap over areas where functionality is a concern, and
- Mitigation of prolonged ponding of surface water in susceptible areas of the cap.

The 30% design will be prepared for review by the City of Dallas and regulatory authorities. After the pertinent reviews and negotiation of design standards, Terracon will develop the 60% design by appropriately revising the 30% design, estimating revised waste disposal and borrow soil quantities, and preparing the preliminary plans. After review by the City of Dallas, Terracon will prepare the 95% design, which consists of bid plans and specifications for the South Loop and Elam Landfill Restoration.

The City of Dallas intends to obtain borrow soils for the capping materials from an offsite location. This proposal does not include the evaluation of borrow soils. Terracon will prepare a borrow evaluation proposal following the preparation and review of the 30% design.
B.2.B Preparation of Pre-Construction Notification
The restoration of the landfill cap near Pond J may necessitate unavoidable impacts to Waters of the US. Terracon will coordinate with project engineers (and other stakeholders, as appropriate) to minimize regulated activities to the extent practicable. If necessary, Terracon will prepare a Pre-Construction Notification (PCN) to the USACE (in anticipation of Nationwide Permit authorization) as soon as the proposed plan of action is identified. The PCN would formally notify the USACE of unavoidable impacts associated with solid waste removal and cap replacement, impact minimization efforts, and mitigation actions (if applicable). The PCN will include:

- Name, address, and telephone number of the applicant;
- Location, description, and purpose of proposed project;
- Jurisdictional determination;
- Discussion of potential impacts to federally listed endangered or threatened species and cultural resources; and
- Mitigation plans for impacts to Waters of the US greater than 1/10 acre.

B.2.C Meetings and Communication with the City of Dallas and Regulatory Authorities
This task represents unforeseen meetings and conference calls with various City of Dallas departments, the TCEQ Solid Waste Section, and the USACE. This proposal estimates labor for senior project personnel to prepare, travel, and attend four meetings.

B.2.D Bidding Assistance
Bidding assistance will be limited to attending one pre-bid meeting at the site and preparing a letter of clarification.

Development and Waste Removal Design Activities for Simpkins Tracts

B.2.E MSW Permit Modification of Non-Capped Areas of Elam Landfill
MSW Permit No. 88 includes areas north and east of the Elam Landfill that we not filled with solid waste. Terracon’s design support will include a change in land use related to permitted, unfilled, areas north and east of Elam Landfill. Terracon understands that the change in land use is necessary to facilitate possible future use of the site in areas within the permitted boundaries of the solid waste unit that did not receive any waste materials.

B.2.F Assessment of Land-Use Restrictions and 10% Design for Vehicular and Bicycle Paths across South Loop and Elam Landfills
The Park and Recreation Department has a master plan to develop an entrance from Highway Loop 12 that will provide the main entrance to the Trinity River Audubon Center and the Texas Horse Park. Additionally, the master plan calls for the development of a bicycle path across the Simpkins and Deepwood Sites. The road, and potential bicycle path, may cross approximately 4,800 feet of the South Loop Landfill and 1,600 feet of the Elam Landfill. This proposal includes
a limited feasibility and alignment study to be performed by Pacheco Koch (with a not-to-exceed budget of $15,000).

Terracon will assess the regulatory requirements for the construction of the roadway, and consult with the TCEQ Solid Waste Section and VCP to develop appropriate land-use restrictions and protective requirements. Once the regulatory requirements are clarified, Terracon will develop a 10% design for the proposed vehicular and bicycle paths across the landfills. The 10% design consists of the siting of the proposed roadway across the landfills, and the development of land-use restrictions and protective requirements.

This proposal does not include a geotechnical evaluation or intrusive investigation of the landfill for the construction of the road. The construction of the road would presumably require the excavation of MSW to an appropriate depth and width, the placement of an HDPE membrane for LFG control, and the placement of structural backfill.

B.2.G Assessment and Design for the Development and Enhancement of Wetlands Adjacent to Landfills
Solid waste was encountered along the banks of Pond J, which is located west of the Elam Landfill. The restoration of the landfill cap near Pond J is addressed in the response to the NOV.

Ponds S and T are located on the southeast side of the South Loop Landfill and may eventually be accessible to Trinity River Audubon Center trails. These two ponds are located southeast of the active seeps observed from the slope failures and south of staining areas observed on the South Loop Landfill. Ponds M, P, Q, and R exist adjacent to the South Loop Landfill on its west and south sides. It is Terracon's understanding that all of these ponds are located within the Trinity River's 100-year floodplain and that Ponds J, S, and T are within the River's floodway.

Terracon will evaluate the ponds south and west of the South Loop Landfill to assess whether they meet the statutory definition of a Waters of the US and document their approximate location, size, and classification. The Waters of the US evaluation will include a resource review and a field investigation.

Terracon will review available published resources including the Natural Resources Conservation Service (NRCS) county soil survey and hydric soils list, the US Geological Survey topographic map, the US Fish and Wildlife Service (USFWS) National Wetland Inventory map, historical and current aerial photography, and Federal Emergency Management Agency (FEMA) Flood Insurance Rate Map to identify mapped soil types, historical conditions, water bodies, floodplain designations, and potential Waters of the US. The field investigation will be conducted according to the routine determination methodology prescribed by the 1987 US Army Corps of Engineers' Wetland Delineation Manual (1987 Manual).
Ponds J, S, and T will be further evaluated to assess the feasibility of developing and/or enhancing the ponds as wetlands. As part of this evaluation, Terracon would delineate the existing boundaries of these ponds to assist with enhancement plan design. The perimeter of each pond will be flagged with sequentially-numbered pin-flags and/or surveyors tape for subsequent surveying. The survey will allow exact location and acreage calculation of Waters of the US to be enhanced as well as facilitate evaluation of potential impacts (if applicable).

Based on recent aerial photographs reviewed, it appears that these ponds have relatively steep sides, and the ponds have varied degrees of hydrophytic vegetation. Terracon will inventory existing desirable, native vegetation in and around the ponds as well as note undesirable nuisance species that may require removal or control. Current pond depths will be evaluated using small watercraft. Terracon will then develop an enhancement plan for Ponds J, S, and T to enhance the natural environment, improving both aquatic species habitat and water quality. The enhancement plan will include a description of:

- Goals for the enhancement project,
- Efforts made to minimize impacts to Waters of the US,
- Existing conditions (including supporting photographs and figures),
- Proposed enhancement activities,
- Success criteria,
- Adaptive management practices, and
- Maintenance and monitoring standards.

At a minimum, the enhancement activities will include a planting plan identifying species, numbers, and placement of desirable native species. The plan would also address noxious or invasive species present (if applicable) and potential control measures. Additionally, the enhancement plan may recommend (based on the evaluation of pond contours) creation of shallow planting benches around the perimeter of the ponds. Finally, the success of the ponds is partially dependant on the health of the riparian corridor in the vicinity, so Terracon will evaluate the adjacent uplands as well as the ponds and make recommendations, as applicable.

Terracon will conduct water quality sampling (analyzing for conventional and non-conventional pollutants listed in the City of Dallas storm water analytical sweep list) at Ponds J, S, and T prior to initiating the enhancement plan, and from landfill seeps if feasible. Although not considered in this proposal, the water quality sampling could be replicated, at predetermined intervals, following completion of the enhancement activities to empirically evaluate water quality improvement.

Terracon assumes that the aquatic planting specifications, and any grading activities, will be included in the bid package with the landfill restoration plans and specifications. Terracon assumes that the construction activity related to the development and enhancement of wetlands would be performed concurrent with the restoration of the landfill cap near Pond J, and that both activities would be addressed in one Pre-Construction Notification to the USACE.
B.2.H Design of Waste Removal from Non-Capped Areas and Site Restoration

Terracon will prepare construction plans for the removal of solid waste, and impacted soil as necessary, from the non-capped areas of the Simpkins Site. The construction plans will include the survey limits and volume estimates of the solid waste and impacted soil. The removal of some solid waste (excluding Pond J and areas subject to the NOV) may require excavation in waters of the United States. For this reason, the survey limits and estimated volume of the solid waste will be prepared concurrently with the 30% design for the landfill restoration subject to the NOV. The surveyed limits and volume estimates will be prepared for the City of Dallas' submission to the VCP and possibly the USACE.

Terracon will prepare 95% construction plans that include surveyed limits and estimated volume of solid waste and impacted soil, presumptive waste classification, designation of access paths, and site restoration specifications.

Terracon assumes that the construction plans for waste removal and site restoration will be included in the bid package with the landfill restoration plans and specifications.

B.2.I Meetings and Communication with the City of Dallas and Regulatory Authorities

This task represents unforeseen meetings and conference calls with various City of Dallas departments and the USACE. This proposal estimates labor for senior project personnel to prepare, travel, and attend two meetings.

B.2.J Bidding Assistance

Bidding assistance will be limited to attending one pre-bid meeting at the site and preparing a letter of clarification.

Regulatory Interaction and Reporting for Non-Capped Areas of Simpkins Tracts

B.2.K VCP Enrollment

Terracon will assist the City of Dallas with the preparation and submission of a VCP Application for the Simpkins site, excluding the waste limits subject to the current NOV. The VCP Application process requires a $1,000.00 fee payable to the TCEQ, and subsequent review time by the TCEQ is charged directly to the Applicant. At the request of the City of Dallas, the $1,000.00 application fee is included in this proposal. Following acceptance into the VCP, Terracon will assist the City of Dallas with the preparation of a TCEQ VCP Agreement, which outlines the terms and conditions and establishes the schedule for submittals and corrective action activities.

Terracon will assist the City of Dallas with the addition of the permitted South Loop and Elam landfills and pre-permit fill areas (currently subject to the NOV) into the Simpkins Tracts VCP site after the response actions to satisfy the NOV are completed for these properties. Based on
analytical data collected to date, Terracon assumes no additional investigation will be required to assess these areas after response actions satisfying the NOV are completed.

**B.2.L  Affected Property Assessment Report Preparation**

Subsequent to the completion of additional environmental investigation at the site, Terracon will prepare an Affected Property Assessment Report (APAR) that will address the information requirements in Subchapter E (Reports) of the TRRP (30 TAC Chapter 350) rule. The APAR will document assessment and investigations conducted at the site, and accomplish a risk-based evaluation of data collected at the site.

Terracon will prepare written responses to TCEQ comments regarding the APAR and associated assessment/investigation conducted at the site. Terracon will additionally interact with VCP personnel regarding assessment and regulatory closure requirements at the site. Based on data generated during the additional investigation and responses from the TCEQ, additional assessment of environmental media may be required to complete regulatory closure. Based on analytical data collected to date, this proposal assumes regulatory closure of the site through the VCP will be obtained under Remedy Standard A for Residential land use. This proposal assumes no site remediation activities or environmental investigation outside the scope of the additional environmental investigation outlined in this proposal will be required for closure of the site through the VCP. This proposal also assumes that an Ecological Risk Assessment will not be required for closure of the site through the VCP.

**B.2.M Additional Reporting, Project Management, and Meetings and Communication with the City of Dallas and TCEQ VCP**

This Task allows for unforeseen meetings and conference calls with the City of Dallas and the TCEQ VCP. This Task also includes the preparation of monthly letters to the City of Dallas to communicate project status, and the preparation of one additional TCEQ correspondence letter (i.e., response to TCEQ comments to APAR). In addition, this Task includes general client and regulator correspondence and interaction (i.e., monthly VCP status letters).

**C. SCHEDULE**

The survey and the site investigations can commence within two weeks of the notice to proceed and the granting of access to the property. Assuming that work is initiated on September 1, 2008, the survey and additional landfill cap evaluations can be completed by November 1, 2008. The 30% design for the landfill can be completed by January 15, 2009. The 30% design is intended for review by the City of Dallas, the TCEQ, and presumably the USACE. The City’s and Regulatory Authority review is anticipated to take 60 days. Assuming comments are received by March 15, 2009, the 60% design can be completed by May 1, 2009. The 60% design would be reviewed by the City of Dallas. Assuming 2 weeks for review and comment, the 95% design and specifications can be completed by July 1, 2009.
Terracon would prepare the Pre-Construction Notification for the City’s submission to the USACE after the completion of the 95% design. The estimated review time by the USACE is 90 days. Thus, USACE approval would not be expected before October 15, 2009.

The proposal for the borrow source evaluation would be prepared after the submission and review of the 30% design. Assuming the borrow source evaluation proposal is submitted to the City of Dallas by March 15, 2009, and the City authorizes the proposal by May 1, 2009, the evaluation of borrow could be completed by August 1, 2009. The evaluation of borrow could be delayed by unforeseen circumstances.

The land-use planning and the investigations and designs for waste removal and wetland enhancement may be performed concurrently with the landfill cap restoration design.

The City of Dallas would presumably seek a construction contract for:

- Restoration of the landfill cover;
- Removal of waste and site restoration for non-capped areas;
- Enhancement of wetlands adjacent to landfills; and
- Construction of dual-use drivable access path at the Deepwood Site.

The design of the drivable access path at the Deepwood Site is not considered in this proposal, but may be performed concurrently. With these schedule assumptions, the City of Dallas could begin the bidding process by August 15, 2009. The City of Dallas’ bidding process and funding approval may require 3 to 6 months. Thus, the City of Dallas may select a construction contractor by February 15, 2010, and construction may begin by March 15, 2010.

D. COMPENSATION

The Scope of Services outlined in this proposal will be performed on a time and materials basis not to exceed $814,464. If additional work is required outside the scope of this proposal, you will be contacted, and upon request, proposed costs for additional work will be provided. Client authorization will be obtained prior to commencement of any additional work outside the scope of this proposal. Estimated project costs are summarized below, and a detailed summary of consulting labor, engineering support services, drilling and subcontractor services, and laboratory analytical fees are presented on the attached spreadsheet:

<table>
<thead>
<tr>
<th>ESTIMATED PROJECT COST</th>
</tr>
</thead>
<tbody>
<tr>
<td>TASK 1—INVESTIGATION</td>
</tr>
<tr>
<td>TASK 2—REMEDIATION DESIGN</td>
</tr>
<tr>
<td>ESTIMATED TOTAL</td>
</tr>
</tbody>
</table>

P08941302 Simpkins Investigations_Design 9-9-2008.doc
E. GENERAL COMMENTS

This Scope of Services will be conducted under our existing Professional Services Contract, which includes a 10% discount on labor. Exhibit C-1, the Fee Schedule for Standardized General Environmental Services, is included as attachments to this proposal. If this Scope of Services meets with your approval, work may be initiated by sending a letter of authorization to our office indicating the services you wish to have performed on the site. Project initiation may be expedited by faxing a copy of the signed authorization letter to 214-630-7070.

The terms, conditions and limitations stated in the Professional Services Contract (and sections of this proposal incorporated therein), shall constitute the exclusive terms and conditions and services to be performed for this project. This proposal is valid only if authorized within ninety (90) days from the proposal date.

If you should have any questions or comments regarding this proposal, please contact either of the undersigned.

Sincerely,

[Signatures]

Alan L. Noell, Ph.D., P.E., CHMM
Senior Remediation Engineer

Carl A. Parten, P.G.
Principal

Attachments: Exhibit C-1, Fee Schedule for Standardized General Environmental Services Spreadsheet – Cost Detail