



CITY OF
TUCSON

ENVIRONMENTAL
SERVICES

May 28, 2013

VIA EMAIL

Mr. Kevin Pierce
Project Manager
EEC, Inc.
4625 E. Ft Lowell Rd.
Tucson, AZ 85712



Re: Notice to Proceed - Prudence Well Vault Upgrades

Dear Mr. Pierce:

This letter serves as a Notice to Proceed to provide construction management and construction services to install fourteen (14) new well vaults at the Prudence Landfill in accordance with your proposal dated April 30, 2013 (attached). The total cost for activities shall not exceed \$62,260 without written approval from City of Tucson, Environmental Services. To coordinate activities, please contact Jeff Drumm at (520) 837-3713.

Sincerely,

Nancy Petersen
Deputy Director

NP/JD/nr

Enclosure

April 30, 2013 proposal

cc: Kathleen Kalthoff, City of Tucson, Environmental Services
Prudence Landfill File

S:\EMCOMMON\Prudence\Correspondence\2013\EEC NTP 5_28_13.doc





April 30, 2013

Mr. Jeff Drumm, P. E.
City of Tucson Environmental Services
P.O. Box 27210
Tucson, Arizona 85726-7210

**Re: REVISED Scope of Work and Cost Estimate for Upgrade of the Landfill
Gas Wells and Vaults at Prudence Landfill, Tucson, Arizona**

Dear Mr. Drumm:

Per our discussions, EEC has prepared this scope of work and cost estimate to modify and upgrade the existing landfill gas (LFG) wellheads and vaults at Prudence Landfill. The original wellheads are contained in partially buried 30-inch corrugated metal pipe with locking lids. The installations are further secured within above-grade locking metal cages.

Over time the cages have been damaged, or in some cases, destroyed by vandals. In addition, the corrugated metal pipes have shifted and soil within the pipe has sloughed, resulting in the wellheads and monitoring ports becoming buried. Monitoring events routinely require hand excavation of soil to access monitoring ports. Additionally, most of the cages and some of the CMP enclosures can no longer be locked and there is concern that monitoring ports and wellheads may become damaged or destroyed due to vandalism and/or the shifted pipes and sloughing soil.

For these reasons, EEC has prepared this scope of work and cost estimate to modify and upgrade the wellheads and vaults at Prudence Landfill. EEC also proposes to upgrade the vaults at existing sump #1 and at two subsurface valve locations, which currently have the same vault configurations as the wellheads.

SCOPE OF WORK

This proposal includes a brief description of the work to be performed followed by costs to complete the work. The following tasks will be performed to complete the scope of work.

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VAULTS

EEC will obtain 14 (eleven LFG wells, two valves, and one sump) precast concrete vaults from Jensen Precast of Tucson. The vaults will be similar in construction to those used at the Vincent Mullins and Speedway Landfills in previous projects. The vaults will be 48-inches by 48-inches by 36-inches deep (interior dimensions will be 36-inches by 36-inches by 36-inches). A 48-inch by 48-inch by 6-inch thick precast lid will be added to the top of the vault to give the entire vault system a depth of 42-inches. The lid will include a locking 36-inch by 36-inch galvanized steel hatch.

LANDFILL GAS WELLS

EEC will remove the metal cages to gain access to the CMP enclosures. Once removed, EEC will excavate around and remove the CMP enclosures to expose the existing wellheads and laterals. The excavation will then be deepened to approximately 42-inches below the surrounding land surface and widened to surface dimensions of approximately 60-inches by 60-inches to accommodate the new precast concrete vault. If trash is encountered at the base of the excavation, EEC will over excavate a minimum of 12" and replace the trash with clean soil leveled and compacted to receive the new vault. EEC will have odor control chemical on hand to apply to exposed waste. With the excavation complete, EEC will cut the well casing below grade to accommodate the new subsurface wellhead installation.

One side of each precast vault will be cored with a 4-inch coring bit to provide access for the existing 2-inch HDPE laterals. The vaults will then be lowered into the excavation and placed on the prepared base of the excavation and the lateral extended into the vault. The vault lid will be installed and sealed per manufacturers specifications. Once installed, the vault system will be backfilled to the surface (2-inches of the lid will be left above grade).

Following the installation of the vault system, EEC will install a new 2-inch vertical wellhead (Forrer Supply), outfitted with an inline 1-inch orifice plate for collecting flow data, in the existing well casing by way of a 4-inch by 2-inch rubberized reducing bushing (Fernco) and hose clamps. The new wellhead will then be connected to the existing lateral by way of 2-inch Kanaflex hose (or equivalent).

SUMP AND VALVE VAULTS

EEC will remove the metal cages to gain access to the CMP enclosures. Once removed, EEC will remove the lid and excavate around the CMP enclosures to

approximately 42-inches below the surrounding land surface and widened to surface dimensions of approximately 60-inches by 60-inches to accommodate the new precast concrete vault. If trash is encountered at the base of the excavation, EEC will over excavate a minimum of 12" and replace the trash with clean soil leveled and compacted to receive the new vault. EEC will have odor control chemical on hand to apply to exposed waste. The new vaults will then be lowered into the excavation and placed on the prepared base of the excavation such that the 30-inch CMP will be inside of the new vault. The CMP enclosures will be left in place to allow access to the subsurface valves that are more than 48-inches below grade. The vault lid will be installed and sealed per manufacturers specifications. Once installed the vault system will be backfilled to the surface (up to 18-inches of the vault system will be left exposed above grade to accommodate the CMP and valve handles).

WASTE DISPOSAL

In-situ waste generated during this project will be reburied on site. The removed metal cages and CMP will be recycled at Los Reales Landfill.

COSTS

The **not-to-exceed** cost to complete this scope of work is \$62,260.00. Labor rates are from EEC's Fee Estimate Summary as submitted to and approved by the City under this contract 120317-01. As always, EEC will only invoice for time and materials actually expended.

We estimate approximately three weeks of field time will be required to complete the scope of work once the new vaults are delivered. EEC looks forward to again providing our professional services to the City of Tucson. Should you have any questions or require additional information, please contact me at 321-4625 (office) or 488-9206 (cell).

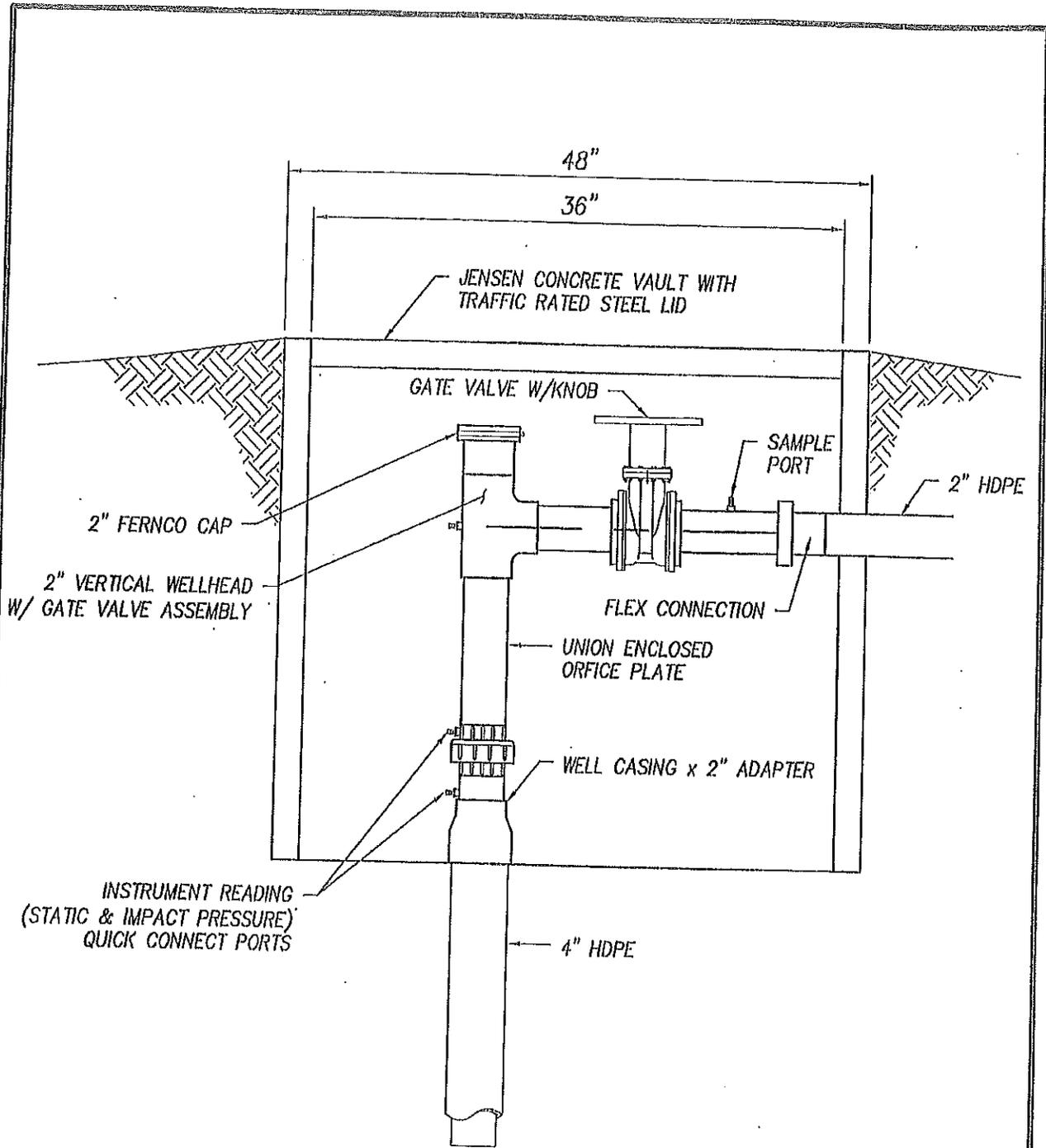
Sincerely,



Kevin A. Pierce
Field Services Manager, Environmental Services
Attachment (1) Proposed LFG Wellhead and Vault Installation

ATTACHMENT 1

PROPOSED LFG WELLHEAD AND VAULT INSTALLATION



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 4825 E. FT. LOWELL RD.
 TUCSON, ARIZONA 85712 520-321-4825

DESIGNED BY:	KAP
DRAWN BY:	BDB
CHECKED BY:	KAP
DATE:	03/2013
SCALE:	NTS

EXTRACTION WELLHEAD AND VAULT

PRUDENCE ROAD LANDFILL

Subject: NTP_EEC_Prudence Well Vault Upgrades
Created By: Nora.Rodriguez@tucsonaz.gov
Scheduled Date:
Creation Date: 5/30/2013 10:43 AM
From: Nora Rodriguez

Recipient	Action	Date & Time	Comment
CC: Jeffrey Drumm (Jeffrey.Drumm@tucsonaz.gov)	Delivered	5/30/2013 10:43 AM	
CC: Kathleen Kalthoff (Kathleen.Kalthoff@tucsonaz.gov)	Delivered	5/30/2013 10:43 AM	
To: kpierce@eectuc.com (kpierce@eectuc.com)	Transferred	5/30/2013 10:44 AM	