



Request for Proposal

Date: November 14, 2017
Project Title: Inman Landfill - Post-Closure Care (PCC) Landfill Gas (LFG) management control system optimization
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Submission Deadline: **No later than 4:30 p.m. Friday December 15, 2017 to John Rapp or Samantha Clark**

1. Introduction

The Inman Landfill is located 7½ miles northwest of Mount Vernon in Skagit County, Washington (Figure 1). Skagit County Public Works operated the facility on 51 acres of County-owned and leased property. The landfill accepted County-generated municipal waste, demolition debris, and special incinerator ash.

In order to control off-site migration of (LFG), odor, and gas buildup under the cover system, an active LFG collection system was installed during PCC construction. The system was built in stages to accommodate the phased closures in 1993 and 1994. The LFG management control system site layout is shown on Figure 2.

LFG management at Inman Landfill utilizes an active gas extraction system consisting of 20 vertical wells (W-1 thru W-20), horizontal trenches with perforated pipe (T-1, -2, -4, -6, -10, -11, and -13), manifold collection system, and blower/flare facility. The blower provides a negative pressure within the gas collection system (i.e., wells and trenches), drawing gas into the system and conveying it to the flare where it is combusted. The motor blower/flare facility location is adjacent to the leachate pond.

Methane migration is monitored under Subtitle D of the Municipal Solid Waste Landfill regulations to determine whether off-site migration of methane is occurring at levels that may be potentially explosive. Quarterly monitoring is performed at monitoring points around the perimeter of the landfill (Figure 2).

2. Scope of Work

Skagit County is seeking proposals that, with the assistance of county personnel, evaluate the current LFG management system, and how the system can be modified, optimized, or eliminated, while still protecting human health and the environment.

The LFG management system has operated since approximately 1992, and sporadically since approximately 2014. County personnel have monitored methane, carbon dioxide and oxygen levels at each extraction well location with a GEM 2000 landfill gas meter. In order to achieve a level of combustible methane that is sufficient to ignite and maintain the flare valves associated with underperforming extraction wells (wells with methane levels below a threshold value of 30-40% methane) have been closed. Presently, there are approximately 6 open LFG extraction wells. However, the LFG management system is underperforming due to low subsurface methane concentrations, aging piping systems, and/or a combination of these factors.

The scope of work would include: evaluating the current LFG management system and whether the initial designed capacity is still appropriate based on the current concentrations of landfill gas being generated at the site; modifying the current active system; implementing a targeted active system; and/or implementing some type of passive system that targets areas with elevated levels of methane.

3. Project Budget

Not to exceed \$10,000.

4. Proposal Submission Requirements

Please include the following in your proposal:

- Methodology and technical approach to the project
- Firm and individual experience with similar projects
- Key personnel
- Proposed project schedule
- Proposed project cost
- Two (2) references
- MBE/WBE/DBE certifications, if any
- Primary office location where work would be conducted
- Physical address, telephone number and email address

There are no formatting requirements for submissions, however submissions should be 20 pages or less, and 10MB or less in file size. Electronic delivery of proposals is welcome; hard copies are not necessary.

5. Selection Criteria

- Methodology and technical approach to the project (30)
- Qualifications of proposer and proposer's personnel (25)
- Experience with similar projects/references (20)
- Project schedule (15)
- Budget (10)

Total maximum scoring points: 100

If interested in the project, please **return the proposal no later than 4:30 p.m. Friday December 15, 2017** to John Rapp or Samantha Clark. If your response is not received by the aforementioned date, your company **will not be considered in the review process.**

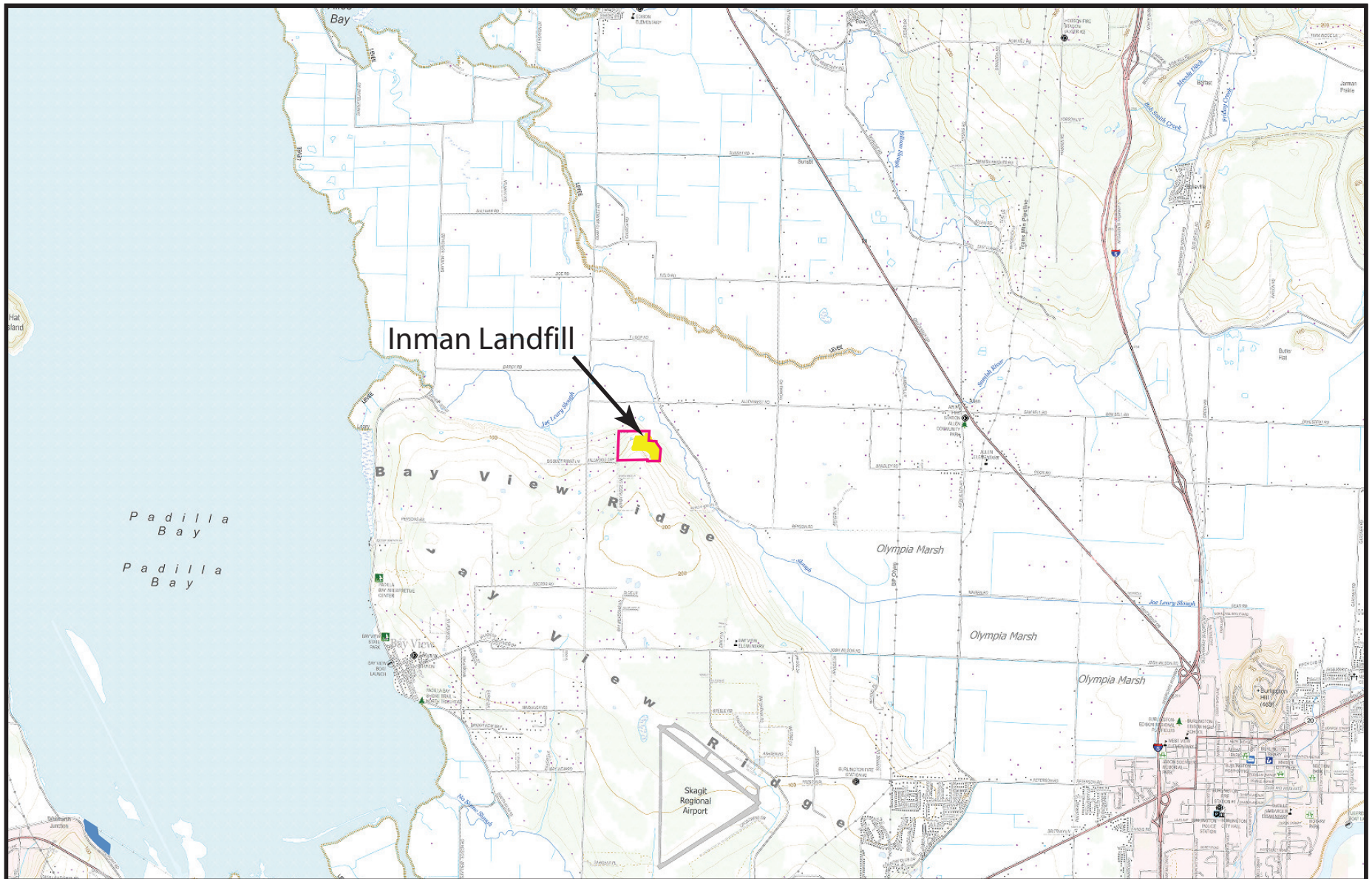


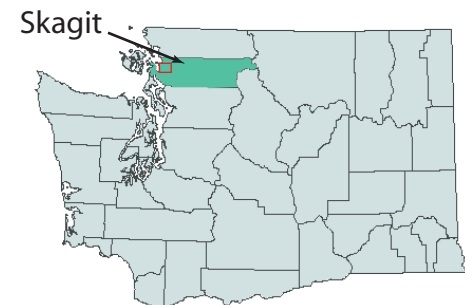


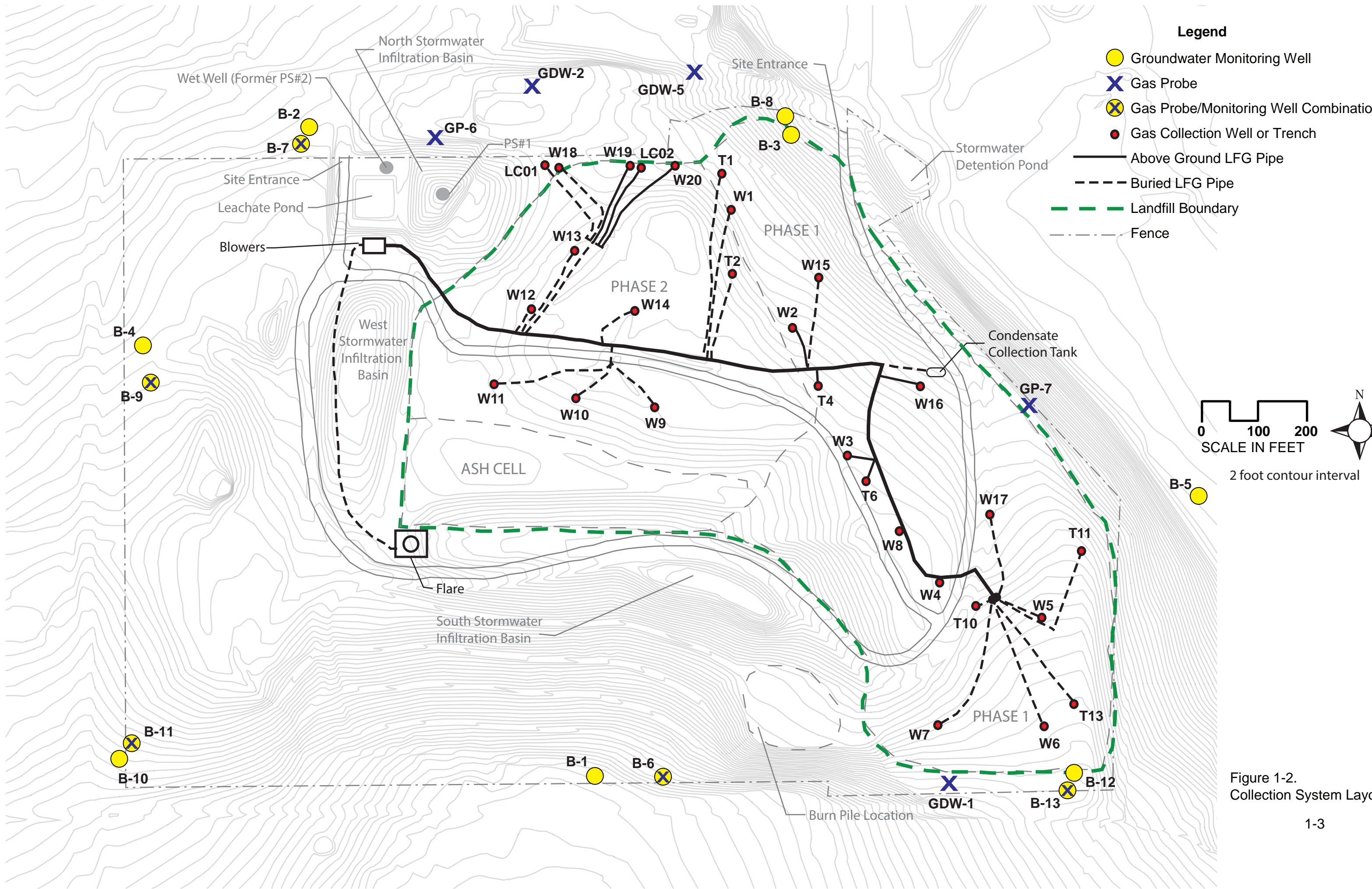
Figure 1. Inman Landfill
Location Map

Legend

-  Parcel boundary*
-  Landfill boundary*

*Locations are approximate.





- Legend**
- Groundwater Monitoring Well
 - ✕ Gas Probe
 - ✕ Gas Probe/Monitoring Well Combination
 - Gas Collection Well or Trench
 - Above Ground LFG Pipe
 - - - Buried LFG Pipe
 - - - Landfill Boundary
 - - - Fence

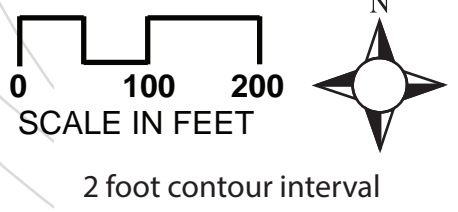


Figure 1-2.
Collection System Layout