



City of San Diego

Environmental Services Department

Natural Resources and Culture Committee

Consultant Services for As Needed Landfill Engineering Services

April 20, 2011





Requested Action

Authorization to expend funds and execute the Agreement with SWT Engineering Inc. for As Needed Landfill Engineering Services





Background

This Agreement will be used to:

- Evaluate the City of San Diego's Landfill sites, including landfill cover and drainage systems.
- Design final cover, drainage improvements and upgrade existing landfill gas collection systems.
- Prepare Construction Plans and Specifications for landfill improvement projects.



Why Approve This Agreement

- Ensure the City's landfills are in compliance with Federal and State regulations.
- Improve landfill gas control systems and reduce potential impacts to the groundwater.
- Decrease risks to public health and safety, as well as to the environment





Arizona St. Landfill

- Located in Balboa Park
- Operated between 1952 and 1974

Engineering Services Required:

- Design landfill improvements to include: grading plans, drainage conveyance systems, and landfill gas control system upgrades.
- Prepare Construction Plans and Specifications for bidding purposes.



Storm drain malfunction due to differential settlement

Ponding around storm drain and on a landfill allows water to infiltrate into the trash which could impact groundwater quality.





Differential settlement
causing compounding
problems





Differential settlement causing tilting of office trailers

Office trailers require continuous adjustment





Differential settlement causing drainage problems and requiring high maintenance of access road





South Chollas Landfill

- Operated between 1951 and 1981
- Portions of Chollas Operations yard are on landfill.

Engineering Services Required:

- Design landfill improvements to include: grading plans, drainage conveyance systems, and landfill gas control system upgrades.
- Prepare Construction Plans and Specifications for bidding purposes.



City of San Diego Environmental Services Department



SCALE 1"=400'
200 100 0 200 400 FT

LEGEND	
	Approximate Limits of Fill
	Landfill Gas Piping
	Lot Line Limits
	Landfill Gas Condensate Trap
	Landfill Gas Well Head
	Landfill Gas Monitoring Well
	Groundwater Monitoring Well
	Landfill Gas Condensate Drip Trap

Revisions	By	Date
New 1999 topo (MAD 83)	MDT	5/01
Added Legend Updated DTG file	MDT	5/20/06
Added Color "B" Sheet Border	MDT	5/20/06
Revised DTG Numbers per Bay ADA for legal	MDT	5/20/06
Added Flyer's Permit Number	MDT	5/20/06



SOUTH CHOLLAS LANDFILL



City of San Diego, California
Environmental Services Department
Refuse Disposal Division



South Chollas Landfill				
Sheet 1 of 1 sheets				
DATE PLOTTED: 11/13/2006				
DRAWN BY: M.D. THOMPSON				
CHECKED BY: M.D. THOMPSON				
DATE CHECKED: 11/13/2006				
DATE	BY	APPROVED	DATE	PROJECT



Water ponding & differential settlement causing road cracks and ponded water to infiltrate into the landfill





Ponding & differential settlement has resulted in areas unable to drain into storm drain

Storm drain





Differential
settlement under
asphalt & visible
cracks on the
asphalt





Water ponding & differential settlement causing buildings to tilt





Storm drain culverts
malfunction due to the
differential settlement.





Performance Measures

- Prepare project specific Task Orders defining tasks, deliverables, schedules and not to exceed budget.
- Ensure compliance with regulatory requirements.
- Review drafts before accepting final documents.





Consultant Services for As Needed Landfill Engineering Services

Questions?

