# Residential Drop-Off Center at Cinder Lake Landfill

Pine Engineering Inc.



- Project Understanding
- Scope of Services
- Project Schedule
- Cost of Engineering Services

## **Project Understanding**

#### Introduction & Background

- Cinder Lake Landfill serves the citizens of the City of Flagstaff and the Coconino County
- 135,000 people served yearly (residential and industrial)
- Service Life ends 2054 (Liability 2084)

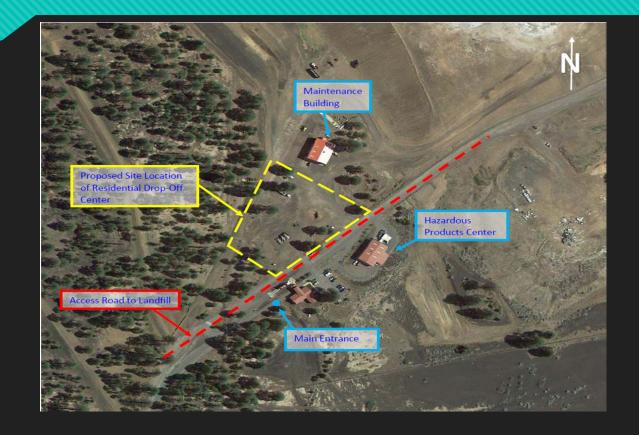
#### Client, Technical Advisor, Stakeholders

- Client: Cinder Lake Landfill, Matt Morales P.E., Project Manager
- Technical Advisor: David Monihan Jr. P.E., R.L.S.
- Stakeholders: City of Flagstaff, Coconino County

#### **Project Description**

- Design of a Residential Drop-Off Center (RDC) to increase the safety of the residential clients.
- Existing Conditions:
  - Hydrology
  - Existing Vegetation
  - Public Entrance

## **Existing Conditions**



# **Project Description: Hydrology**



#### Project Description: Residential Drop-Off Center(RDC)

- Needed to keep residents out of main drop-off area where injuries could occur.
- 2.50 acres of land for RDC
- Drop-Off bins include
  - MSW, and industrial waste
  - Recycling (Paper, Plastic, etc.)
  - Wood waste
  - O Green waste
  - White goods
- Drop-Off does not include
  - Chemical Waste
  - Appliances
  - Paper Waste

#### **Exclusions**

- Environmental Studies
- Utilities connections
- Geotechnical Investigations
- Archeological Studies
- Landscaping Design
- Flagstaff City Submittals
- ADEQ AZPDES Notice of Intent form

#### **Scope of Services**

- Topographic Survey
- O Retention Wall
- Drainage/Grading Plan
- O Stormwater Pollution Prevention Plan
- On-site Construction Plan
- Traffic Report
- O Design Layout
- Engineer's Opinion of Probable Cost



- Social
- Economical
- O Environmental

#### Schedule

- Notice to Proceed: January 13, 2014 (1 day)
- Surveying (Boundary Establishments): January 14-15, 2014 (2 days)
- Traffic Analysis: January 16-28, 2014 (9 days)
- Hydraulic Analysis: January 29 to February 10, 2014 (9 days)
- Retention Wall: February 11-13, 2014 (3 days)
- O Design: February 14 to April 4, 2014 (36 days)
- 90% Report: April 21, 2014
- Final Report: May 1, 2014

# **Cost of Engineering Services**

Personnel	Person	Hours	Rate, \$/hr	Cost, \$
	SENG	200	125	25000
	ENG	680	110	74800
	LAB	10	44	440
	INT	272	25	6800
	AA	20	38	760
	Total personnel			107800
Travel	Local meetings			
	5 mtgs*30mi/mtg	\$0.40/mi		60
Overhead	o migo oomii mig	¢0.10/111		38952
TOTAL				146812

### Questions?