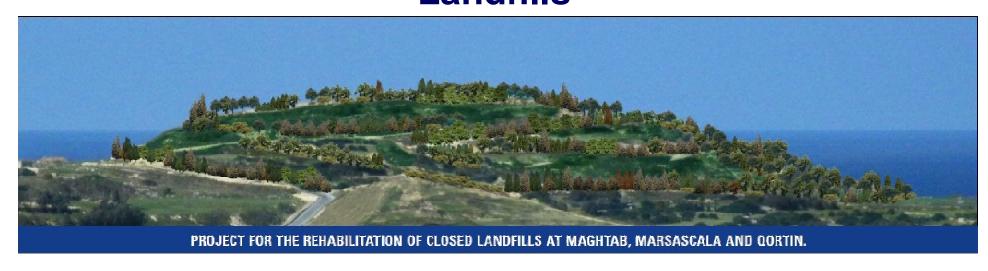




CF118

Rehabilitation and Restoration of Closed Landfills



Monitoring Committee Nov 2010

Architect Giorgio Schembri BE&A (Hons) A&CE, Project Leader







Project Background

The project is the final stage of the closure and rehabilitation of:

- 3 Maltese Landfills
 - Magħtab and Marsascala landfills in Malta; and
 - Qortin landfill in Gozo.
- Closure dates:
 - Magħtab and Qortin landfills; April 2004
 - Marsascala landfill; 1970's

FUTURE PERSPECTIVES 2013

Rehabilitation Project at the Maghtab Closed Dump











Project Background

Application Status

- Preparation for this project started from Year 2006
- Informal Submission of Application November 2009
- Formal Submission of Application May 2010
- Approved July 2010

JASPERS Assistance

 Starting from the action plan for 2007, JASPERS assistance was sought in connection with the Project Concept and Design, Project Application and CBA.







Project Objectives & Contributions

Key objectives are:

Maghtab and Qortin;

- To have cost-effective capping
 - restoration with the objective of re-use of the sites
 - consequent reduction of visual nuisance
- The improvement in the control of aerial emissions of landfill gases
 - Methane gases and
 - combustion gases by the existing ERDF funded aerial emissions control system;
- A reduction in the leachate volume produced
 - consequent impacts on nearby groundwater quality







Project Objectives & Contributions

Marsascala;

- To have cost-effective capping and subsequent restoration for eventual re-use.
- As a result of the interventions envisaged in this project, Maghtab, Qortin and Marsascala landfills will be rendered suitable for beneficial use.
- A Rehabilitation works are required at the three sites to ensure that:
 - 1. environmental risks are minimised; and
 - 2. deteriorated land is restored.







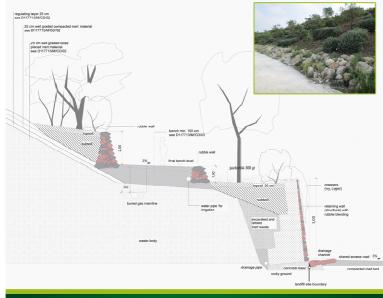
Proposed indicators & achieved

to date

- The relevant output indicator is defined as:
- Number of landfills rehabilitated:
 - The target value was one. The proposed project will rehabilitate three landfills
- Area in Sq m of rehabilitated land from landfills.
 - The Target value is **300,000 m**².
 - The proposed project is 370,000 m²
- The principal beneficiaries are:
 - residents of Malta (410,000) and
 - tourists (approximately 1.2 million visits per annum)

FUTURE PERSPECTIVES 2013

Rehabilitation Project at the Maghtab Closed Dump









Proposed indicators & achieved to date

- The population in the area surrounding Magħtab landfill is 54,153
 - includes a number of the most important tourist resorts in Malta (St Paul's Bay, Bugibba, Qawra and Mellieha).
 - These will benefit from:
 - reduced visual disamenity, improvements in air quality (and reductions in associated health risks),
 - · improvements to groundwater quality and
 - the use of the site for recreational use.
- The population in the area surrounding Qortin landfill is 12,064
 - includes a tourist resort (Marsalforn) and Rabat the capital of Gozo.
 - These will benefit from:
 - reduced visual disamenity, improvements in air quality (reductions in associated health risks) &
 - promote beneficial use.





Proposed indicators & achieved to date

- The population in the area surrounding Marsascala landfill is 9,346
 - These will benefit from:
 - · reduced visual disamenity and
 - the development of the site for re-use







Problems encountered & mitigation measures

Problems encountered –

- Design Site stability; Underground fires
- MEPA Permits vegetation (indigenous plants were a must); gabion walls were not permitted
- Tendering process time consuming;

Mitigation measures –

- Different design solutions for Capping of landfills
- Careful selection of trees and plants that withstand site conditions.
- Improvements to time management with regards to drafting, issuing, evaluating and awarding of tender.







Project schedule

Marsascala

Project Management tender - Awarded

Works Tender – Evaluation of bids in progress

start date: 26/11/2010

end date: 03/04/2012

Maghtab

Project Management tender- evaluation of bids in the final stages

• Works Tender (Phase 1) – Evaluation of bids in progress

start date: 29/12/2010

- end date: 12/12/2011







Project schedule

Qortin

Project Management tender – Awarded

Works tender - to be drafted

start date: 02/09/2011

end date: 15/04/2013

- Possible delays in the commencement of the works due to delays incurred by the tendering procedures
- Remedial Measure Optimization of the respective project plans







Conclusion

Targets:

- For the coming 6 months:
 - Commencement of the Works related to Rehabilitation and Restoration works (Marsascala)
 - Commencement of the Works tender for the Rehabilitation and Restoration works (Maghtab landfill Phase 1)
 - Commencement of Drafting of the tender for the Rehabilitation and restoration of Works (Maghtab Phase 2)
 - Commencement of Drafting of the tender for the Rehabilitation and restoration of Works (Qortin)









Conclusion

- For the coming 12 months:
 - Commencement of Works in relation to Rehabilitation and Restoration works at Qortin and Maghtab Phase 2







Conclusion

Project cost (Public eligible amount) € 26,224,382

• Contracted (to date) € 908,677.52

• Disbursed (to date) € 542,740.58

Project end date
 July 2013







Thank you!



Operational Programme I – Cohesion Policy 2007-2013 Investing in Competitiveness for a Better Quality of Life

Event part-financed by the European Union

European Regional Development Fund (ERDF)
Cohesion Fund (CF)
Co-financing rate: 85% EU Funds; 15% National Funds

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