

## PROJECT SHEET

Mobile\_Application\_for\_Checking\_Property\_Compliance.doc

# Mobile Application for Checking Property Compliance

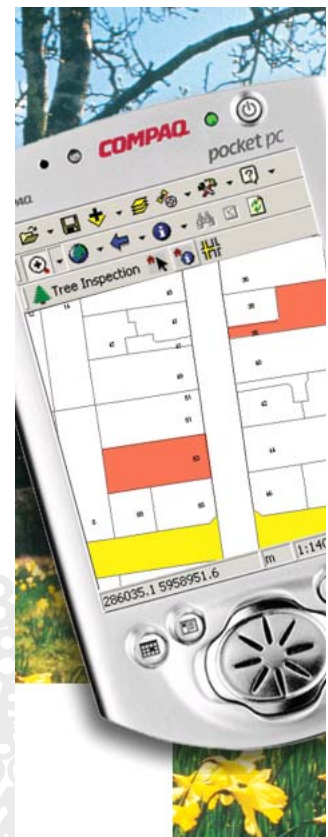
Client: Julien Harrison-Rogers (03) 9518 3659, City of Monash, Victoria

The City of Monash is required to inspect trees on private property and determine if they encroach on footpaths. To conduct this inspection in the most effective manner, the City contracted Spatial Vision to develop a mobile computing solution that was integrated with their corporate GIS.

Each year a Monash inspector assesses every property in the municipality to determine whether trees on private property encroach on the footpath. At any non-complying property, the inspector may either leave a card or return to the office to generate a letter to the owner requesting that the vegetation is pruned ("Notice to Comply"). After 14 days, the inspector revisits any non-complying properties to determine if they have heeded the Notice. The inspector may make further trips to verify whether the owner has complied. The original business process to support this activity required several hours of administrative follow-up in the office to generate letters and maintain records.

The challenge for Spatial Vision was to design a mobile application that worked in concert with this business process. The mobile application was required to enable capture/updates of non-compliance. It needed to be readily updated with spatial data and previous inspections results so that the inspector could easily see the location and the status of non-complying properties and areas already inspected. To reduce data-entry errors, the application was designed to use GPS to orientate the property map to the location. On return to the office, captured data needed to be easily updated through synchronisation back into the corporate database to enable analysis of field captured data and generate letters to property owners.

Spatial Vision developed the compliance application by customising the ESRI ArcPAD environment and data-entry forms using Microsoft Pocket Access to run on a handheld PDA device. The final Mobile Tree Inspection module was implemented after a single training session of an hour.



*"What came as a surprise was that the uptake of the new mobile technology proved to be problem free. We were expecting that inspection staff would have difficulty adapting to the GPS technology, and again, surprisingly, the transition was painless"*

Julien Harrison-Rogers,  
Monash's Project  
Manager

## Demonstrated Capabilities

- Design of system architecture and data model.
- Understanding of the Windows CE Environment, including VBScript and synchronisation with desktop computers
- Customisation of ArcPAD environment, data extraction tools and data-entry forms
- Ability to understand local government business practices

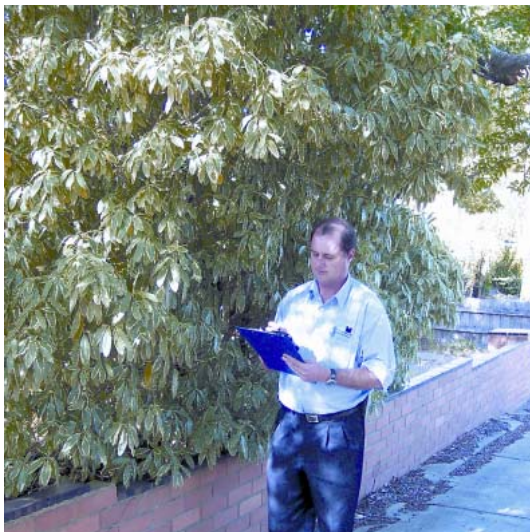
## Resources

Ishara Kotiah was responsible for design of the data model and development of the product.

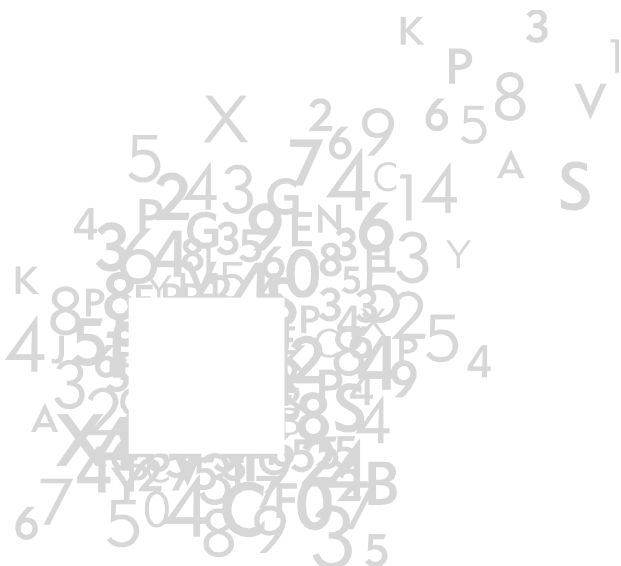


## Technologies Applied

- ArcPad Developer's Kit
- Microsoft Pocket Access
- Microsoft Access



A major focus for the design of the application was ease-of-use (inspectors may have no prior computing or technical skills). Spatial Vision worked closely with Monash staff in the design and testing stage to ensure any operational issue, regardless of how trivial, were fully resolved.



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