



Sunshine Coast private hospital bus turnaround

Client: TransLink
Design Fee: \$120,000
Construction Cost: @\$1M

An example of a risk
management approach to
design, concept to completion

Marie Gales

Introduction



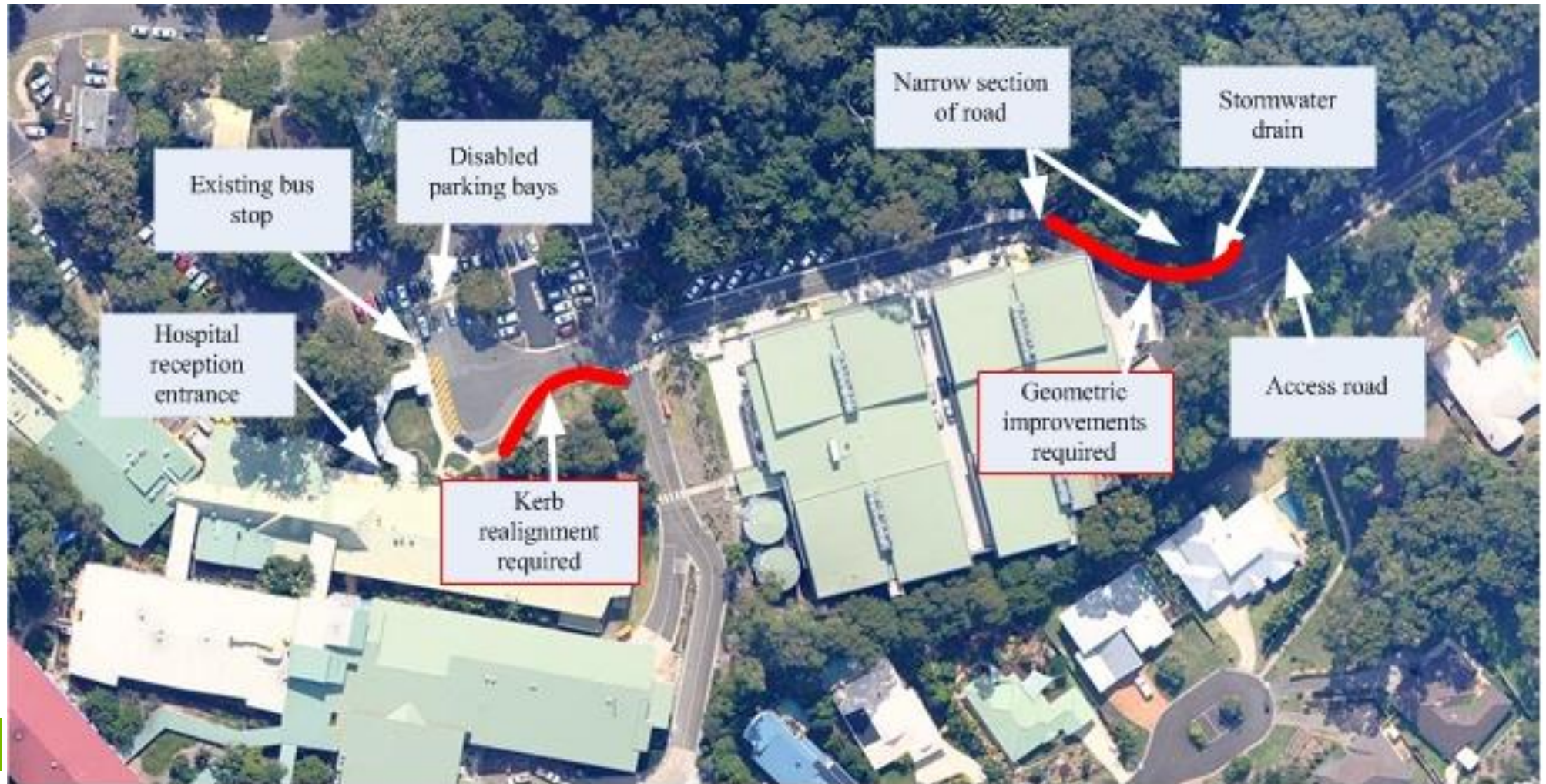
- Larger buses on the route servicing Sunshine Coast Private Hospital
- Stop blacklisted and operations stopped
- Nearest location to drop off passengers 600 metres away
- Need to address unacceptable level of service and pedestrian safety
- Need to improve safety of bus operation

Project Objectives



- Reconfigure the bus stop approach by providing a wider turning area for the buses, so that they had a simplified approach to the bus stop
- Reconfigure the access road to the car park area to provide sufficient width for a bus to travel safely into the car park area, and to improve sight lines to reduce the likelihood of conflict between buses and oncoming vehicles

The original scope



Stakeholders



Direct Involvement:

- TransLink
- Bus company
- Bus drivers union
- The hospital
- TMR

Secondary Involvement:

- Sunshine Coast
Regional Council
- The hospitals architect

Understand the problem– on the bus

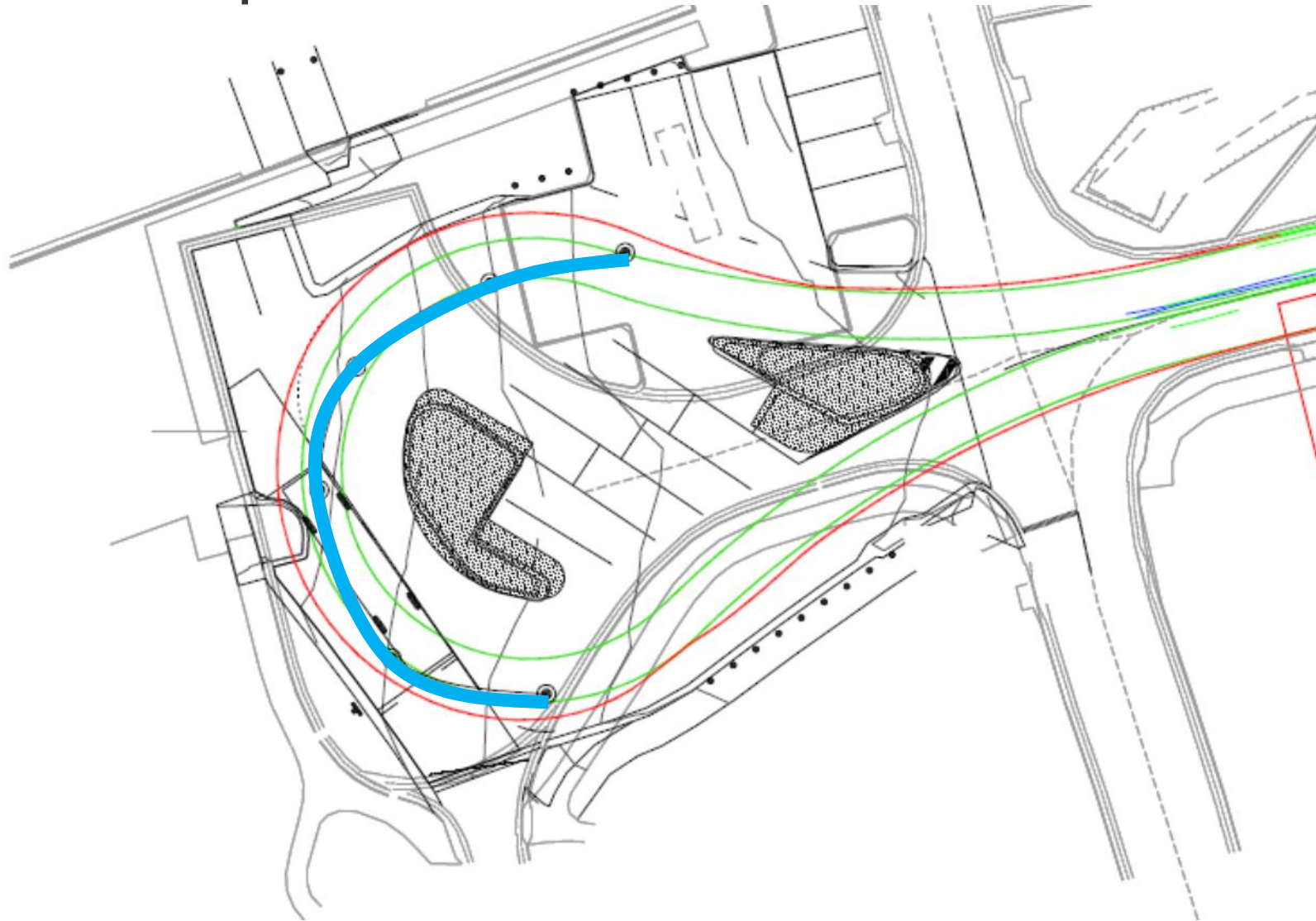


Understand the needs

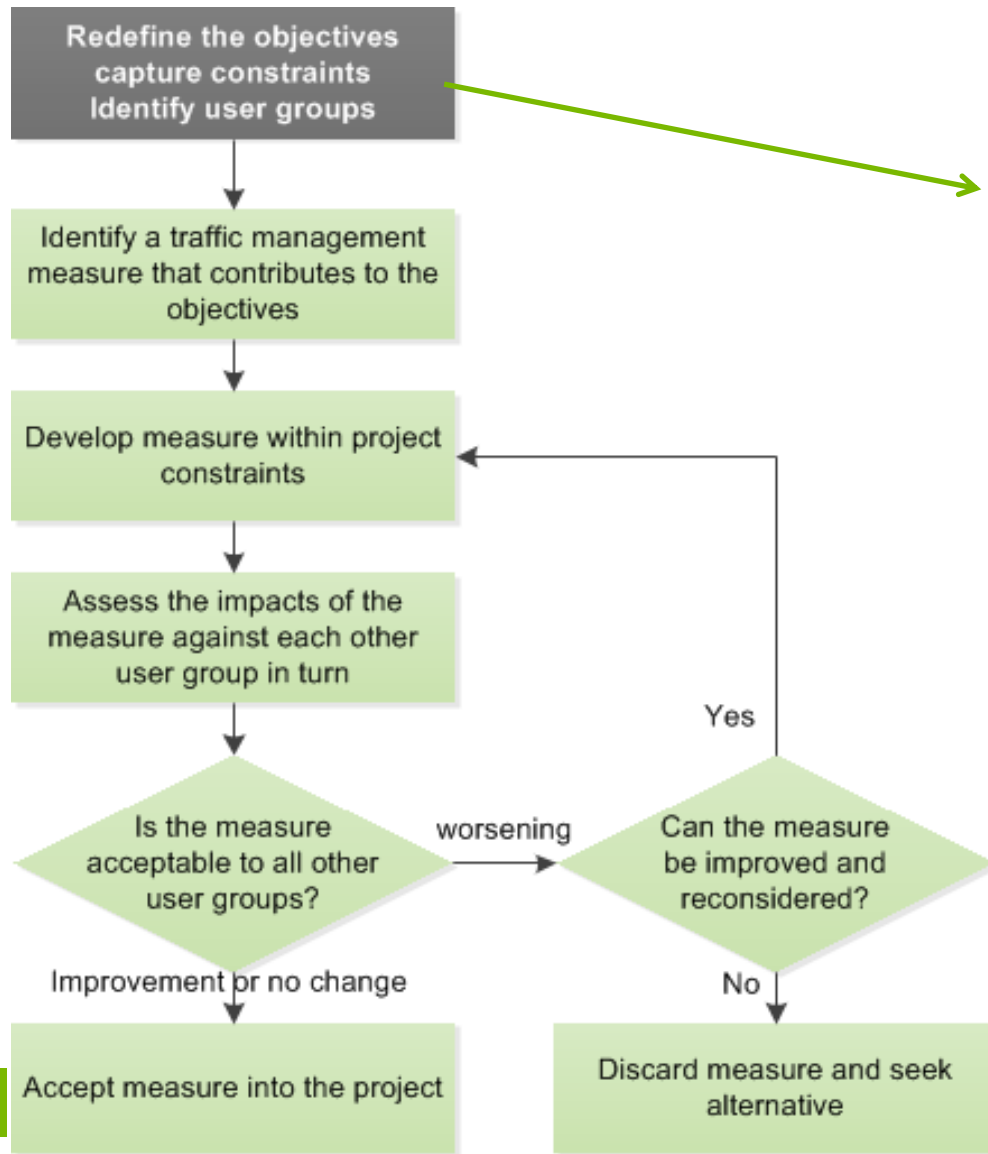


Bus turn template

Bus turn trial

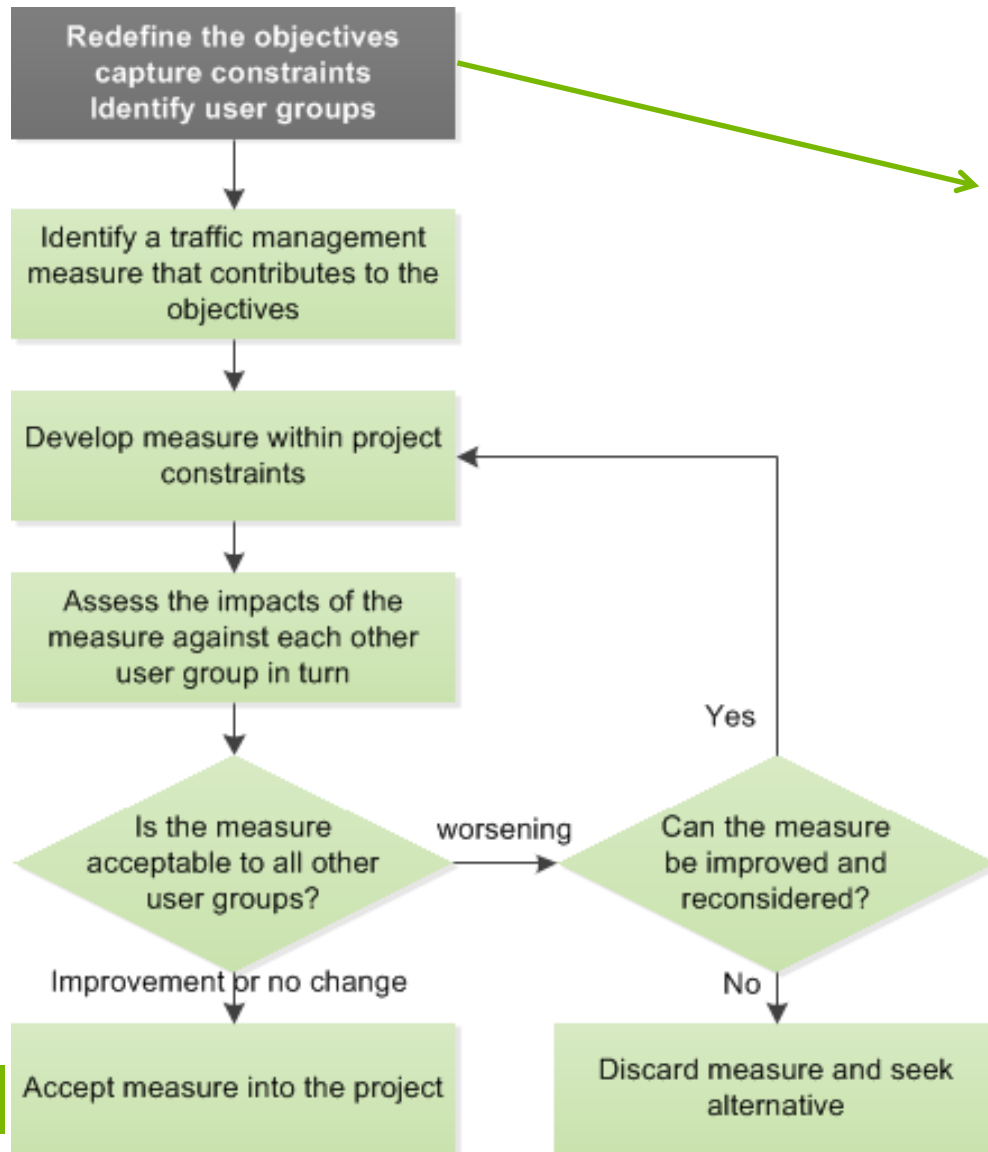


Define New Project Objective



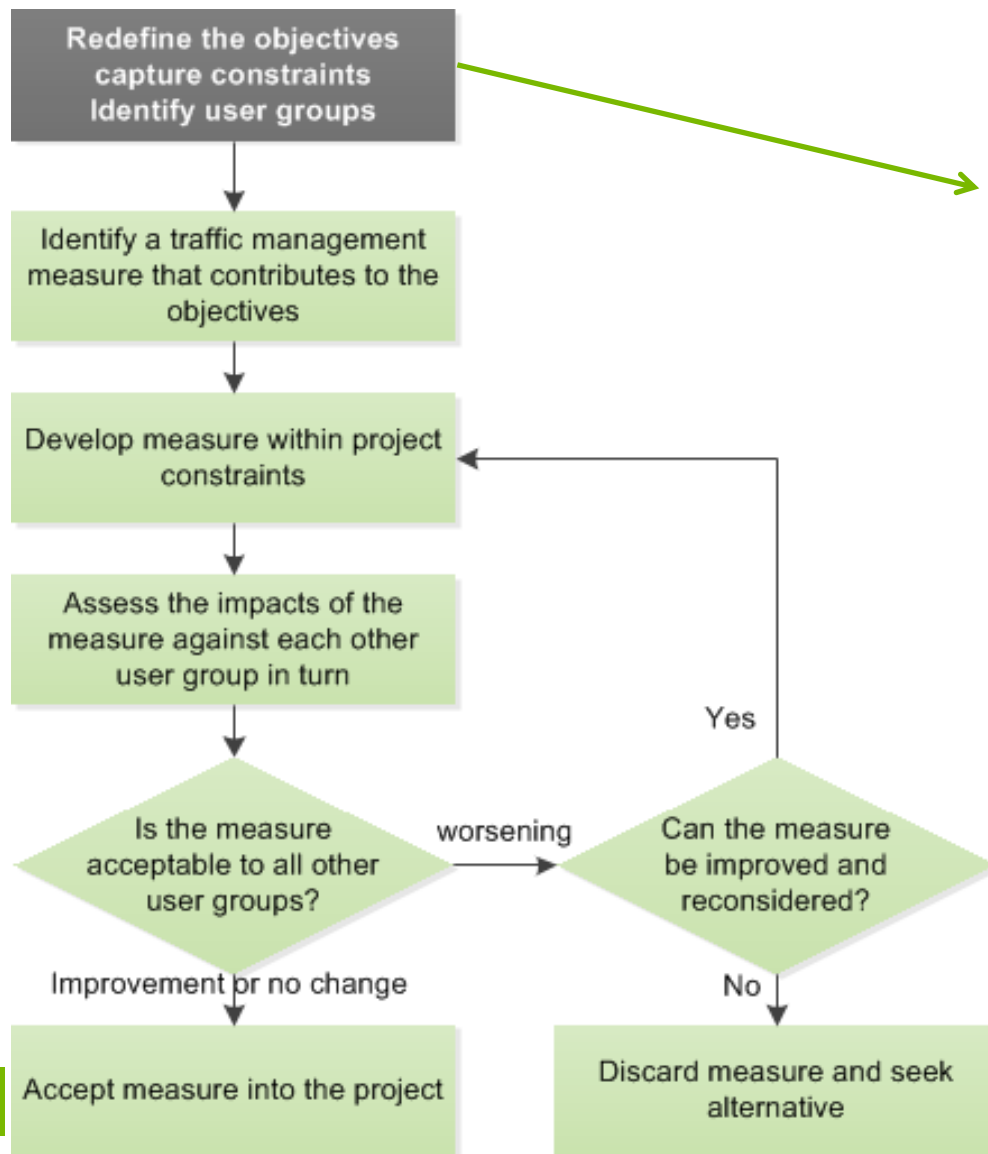
Provide improved bus facilities, whilst maintaining or improving the level of provision and safety of pedestrians and other users in the area.

Define Project Constraints



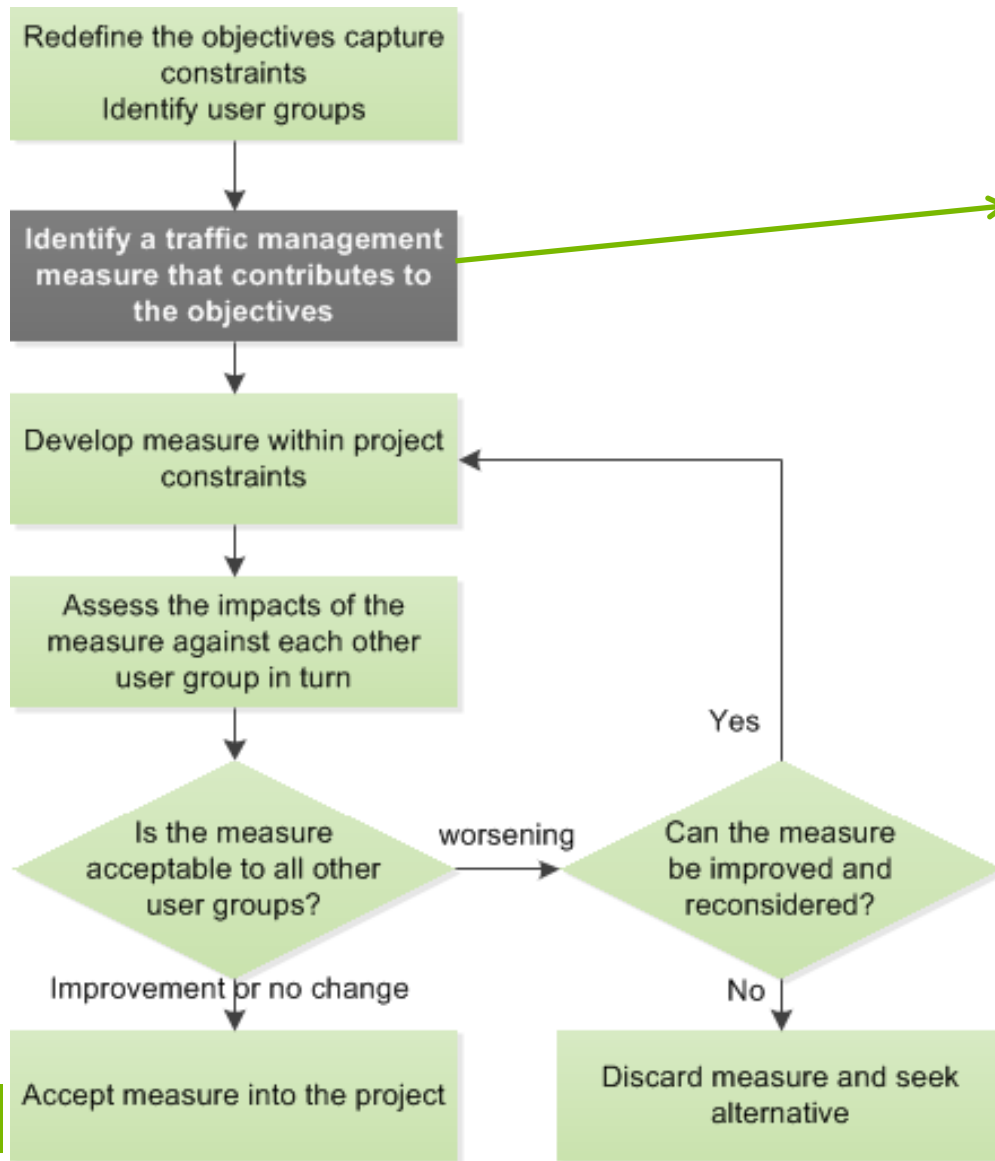
- No loss of parking
- No impacts on surrounding council roads
- No change to the access/exit point
- Maintain access to underground loading area
- Retention of disabled parking spaces
- No impacts on the protected fauna habitat

Define User Groups



- Pedestrians, staff (regular users)
- Pedestrians, visitors (occasional/ new users)
- Drivers, regular
- Drivers, occasional/ new
- Bus Drivers, professional driver
- Delivery Drivers, professional driver

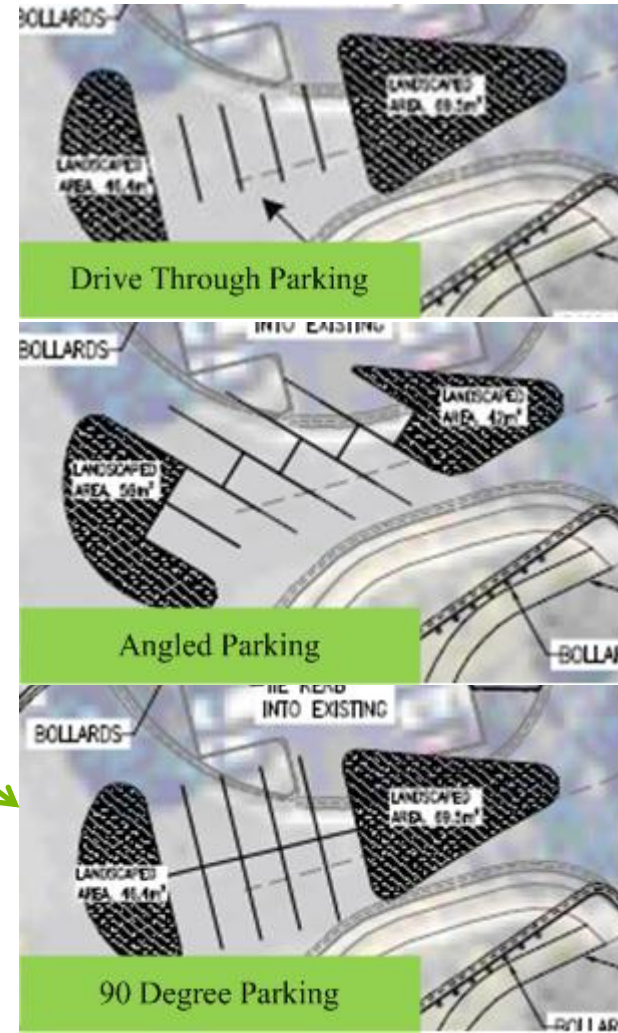
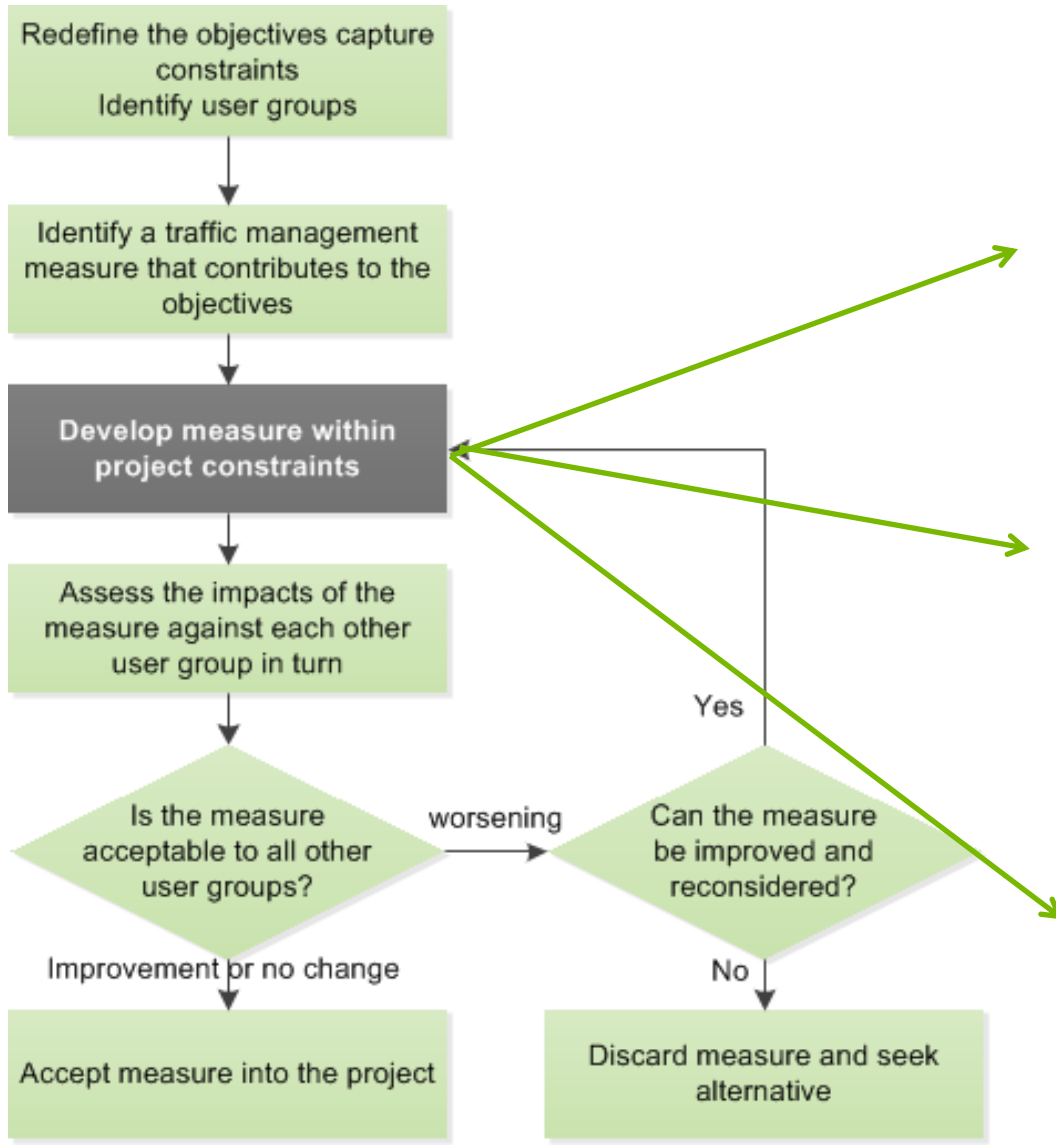
Identification- an example



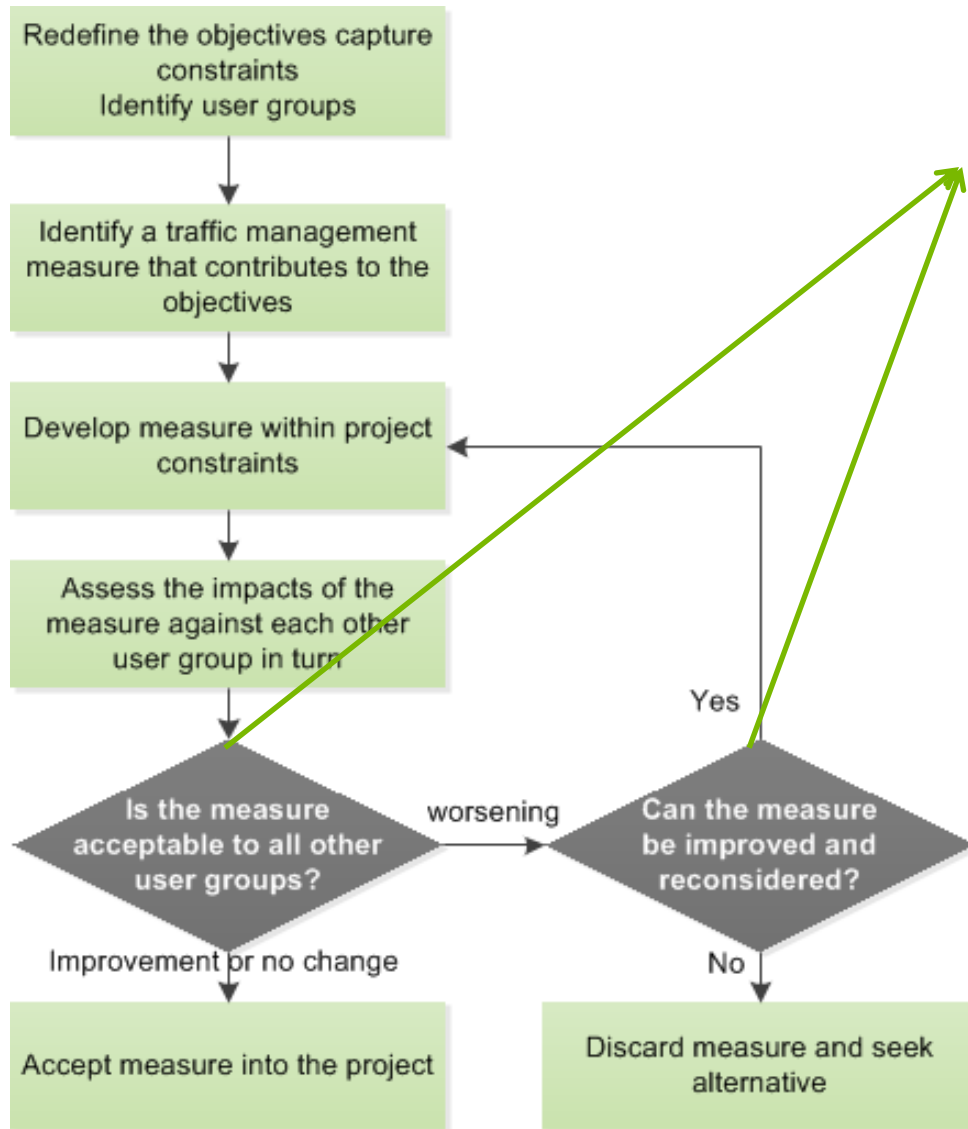
Central island car parking area :

- No loss of car parking
- Maintenance of access arrangements
- Maintain access to underground loading area
- Retention of disabled parking spaces

Develop Options – an example



Refinement – an example



Angled Parking

Drive through issues could be avoided by the introduction of bump kerbs

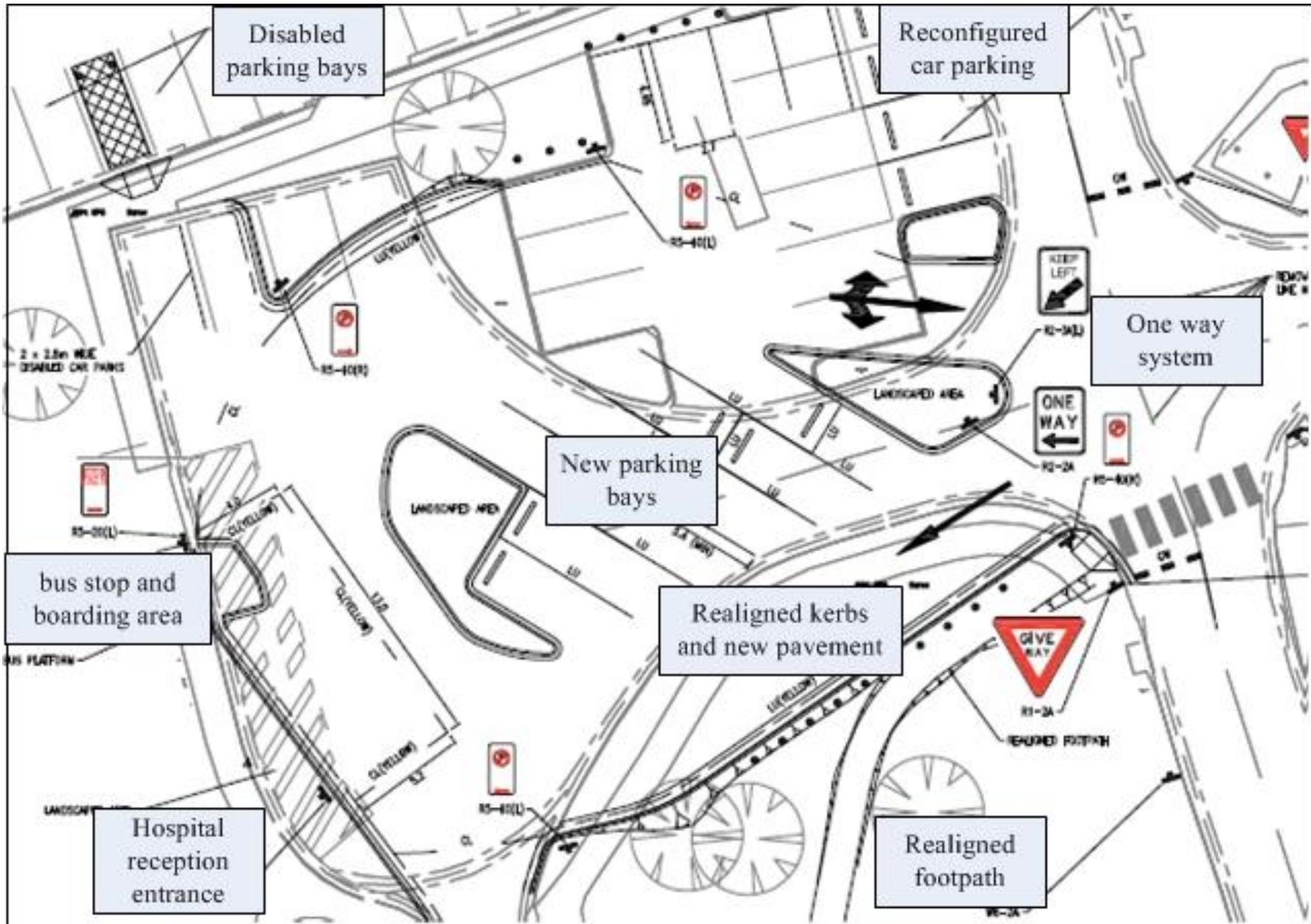
Ensure lighting was adequate

Provide upgraded disabled parking

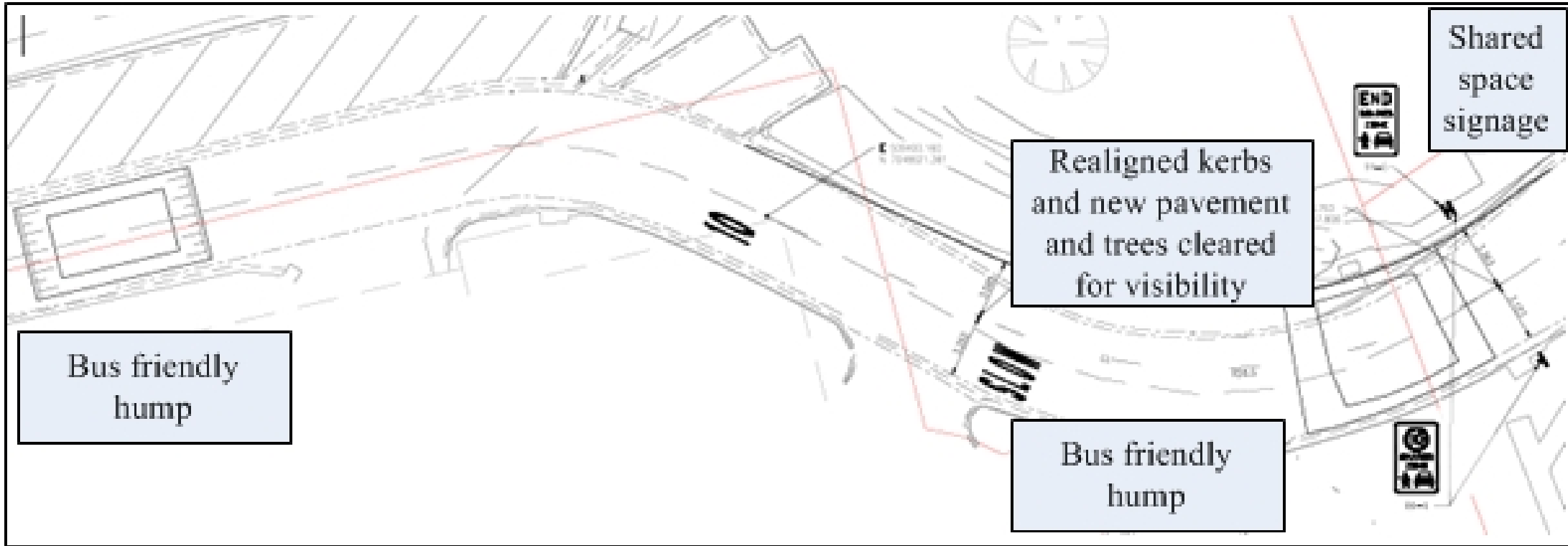
Revised Scope

- **Realignment of the kerb lines and additional road pavement on the approach to the bus stop** (approximately 10 times the area originally scoped)
- **Relocation of 2 light poles**, installation of 2 additional light poles
- **Re-alignment of the footpath**
- **Realignment and widening of hospital access road**
- Construction of a bus boarder platform
- Reconfiguration of existing car parking
- Incorporation of additional replacement parking
- Upgrade of disabled car parking spaces
- Bus friendly humps
- Shared space signage
- Improved signage along the bus route within the hospital
- Advance warning signs on Elsa Wilson Drive.
- Reconfigured stormwater drainage

The Bus Turnaround Area



The Access Road



Key Challenges



- Multiple stakeholders
- Advocating for all users
- Convincing people that a non-standard approach could work
- Convincing the client and end user of the need of the physical extents of the works
- Lack of existing information eg stormwater network
- Getting the Drivers Union to sign off the new stop to allow services to start running again

Key Successes



A DDA compliant bus stop

A more legible environment for all users



Key Successes



**Improved access
alignment, visibility and
speed control**

**A facility that has
operated successfully
for 18 months**



Learnings



- Inclusive process
- Time intensive
- An experienced engineer essential
- Documentation is king
- Challenge the standards
- Encourage innovation
- Learning and development opportunity

Vision Action Results – A personal take



My Vision:	Small improvements can make a big impact Engineers can approach design in this way to produce cost effective safe solutions
My Action:	Apply these principles to all projects, where appropriate Develop young engineers to understand the principles through project involvement and mentoring
My Results:	Make real improvements through projects and leave a legacy of capability

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Questions?