Methodology Mass Land Appraisal Valuation of Park Trunk Infrastructure

Instructions:
This document provides an overview of the approach and methodology followed to develop a land valuation model. The purpose of the model is to valuate existing park land, as well as to estimate the value of land to be acquired in future.
The approach and methodology was developed by a qualified land valuer, and the model (which is spreadsheet based) was developed in-house by Logan City Council (LCC).

Identification:
The individual lots have been identified by access to the document management (DM) system of LCC or by a request sent to the Department of Natural Resources (DNR) and in particular the Register of Titles. A final list of approximately 2,200 properties was sent to DNR for an Investigative Search of the Registry to identify the ownership of the property and the date which it became the property of LCC.
The result of the search was sorted into properties that satisfy the requirements of the Department of Planning and Infrastructure (DIP), as provided by the Statutory Guideline (01/09). This stipulates that land values for properties acquired after 1 January 1990 can only be costed in the Infrastructure Charges Schedule (ICS).

Date of valuation:
30 June 2009

Requested information
1. A download of all recent sales information from January 2008 to July 2009 was obtained from the major property information network ‘RP Data’ which included:
a. All vacant urban lots Land use 01 and Land use 04 (as prescribed by Department of Environment and Resource Management).
b. All improved large home sites Land Use 05, out buildings Land Use 06, and Primary Production properties Land Use 60 - 89 (as prescribed by Department of Environment and Resource Management).
c. Section 25 properties in subdivision (as prescribed by Department of Environment and Resource Management).
2. A spreadsheet of all property development applications for the last two years was obtained and referenced back to the sales download in order to identify improved properties bought for development or subdivision. The added values of the improvements were then applied to sales value to arrive to the ‘analysed sales value’ (ASV). Sales considered then considered suitable were then included in the sales data list. (See worksheet ‘Sales_Data_08_09’ doc id: 6857306).

The sales data and the information obtained from Council have indicated a number of factors:
1. Significant land banking by developers in a number of localities particularly Marsden and the investigation areas around Greenbank and Park Ridge.
2. Reconfiguring of boundaries on a number of parcels in the more closely settled areas of Eagleby, Loganholme, Tanah Merah, Shailer Park, Rochdale, Cornubia and Daisy Hill. This has resulted in the subdivision of larger lots into smaller parcels. This has influenced the market value of any property with the right criteria (i.e. locality, area and topography characteristics).
3. A significant number of demolition applications in the more closely settled areas indicate a changing city landscape, to a higher density residential parcel in some areas e.g. multiunit developments.
4. Previous low valued areas such as Beenleigh and Eagleby are now moving upwards to more closely reflect higher valued surrounding areas. Properties in close proximity to the railway line with express trips to major centres or Brisbane CBD and the improvement of roads is another contributing factor to increased land values.

VALUATION PROCESS

The park lots are valued on a mass appraisal basis:-

1. A desktop valuation has been applied on the individual lots. Normally a residential property is valued on a site basis and not on a rate per metre, however in this case properties which are located in residential (multi-unit), industrial or commercial areas in well established suburban localities reflect the development potential of the lot and as such a rate per meter is reasonable.

The individual lots have not been inspected, however all lots have been viewed via current Logan City Council data, including:

   a. 2008 Aerial photography;
   b. Accurate identification of the land by the cadastral mapping, to confirm Real Property Description text, easement parcel, and topographical and environmental features including contours, waterways, flood plan management areas, vegetation management areas and the like;

2. All constraints have been identified using the Logan City Population Model assumptions GIS data. All reasonable steps have been taken to be accurate on the identification and description of individual lots and the assessment of constraints which affect them as provided by Council and confirmed by desktop review. If any constraints affecting a parcel were indicated, the coverage was assessed on a percentage of area basis and noted in the relevant column.

3. The park individual lots were valued on a vacant basis and where ever possible, vacant sales have been used to arrive at a value. Most small lot residential sales have been cleared and as such an allowance has been made for clearing and shaping to bring the land back to its unimproved value. This negates any vegetation management issues.

LAND APPRAISAL METHODS

1. A spreadsheet of residential benchmarks as well as a spreadsheet of value ranges have been included, to reflect the current values for particular properties and to give an accurate indication of the market for residential parcels (See worksheet ‘Sales_Data_08_09’ doc id: 6857004). In assessing the value of individual lots the best indication of value is comparable sales.

2. Actual sales values were used to calculate the unimproved values of the site. This value was then used to calculate the value of individual lots on a rate per square metre basis.

3. In areas where there was no comparable sale information suitable for a particular lot, sales from similar areas and/or appropriate lot size were used (see worksheet ‘location sales analysis’ doc id: 6857004).

4. In cases where sales from a comparable locality and/or lot size was unavailable, an ‘economy of scale’ calculation was used (see Section ‘Economy of Scale Calculation’ following). This allows a sale with a small area to be used to value a larger area lot, or a large area sale to be used to value a small lot.

5. The overall value of an individual lot was arrived at by applying a rate per square metre in line with sales evidence (sale closest to the median). For properties located within residential, industrial or commercial zones, where the property of the property in the open market would reflect a higher value based on these surrounding uses, a zoning allowance was applied. However, having regard to the recommendation from the Department of Infrastructure and Planning dated 25 October 2010; no zone allowance is applied to land values.
6. Allowances for constrained land were applied to the non developable portion of lots. Therefore, each property has a component of 'Land Value Unconstrained' and a component 'Land Value Unconstrained to calculate the total value of the lot. In some situation either of these components can be zero.

7. A constrained allowance of 100% was used if a land parcel was considered to be suitable for no other purpose other than open space and as such has been valued in line with benchmark sales data for properties with similar constraints. (Refer sales ref id 6016, which is 100% flooded unable to be developed and suitable only for cultivation).

8. Where possible rural sales have been used to value individual lots that are affected by constraints. No allowances were applied to individual lots if they are valued as a rural property using rural sales (See definition of rural sales).

ECONOMY OF SCALE CALCULATION

The economy of scale calculation is a "rule of thumb" which allows a straight line calculation depending on the area and the level of value used. This method is a guide only and is only used when there is no appropriate sale information available. On a 'Mass Appraisal' basis it can be used to set the relativity between lots with different areas in the same area in the absence of sales however in future assessments the existing relativity will be changed when market information become available.

Put simply the square root of a lot area is used in reference to the square root of a larger or smaller area. This option has been provided in the appraisal model (doc id: 6857004).

e.g. A sale with an area of 500m² sold for $250,000 reflects a rate of $500/m². The square root of 500 is 22.36.

To assess a larger area of 1000m² (Square root is 31.62).

- Smaller area / larger area, 22.36/31.62 = 0.7071
- $500/m² x 0.7071 = $353.55
- $354 x 1000m² = $354,000

To assess a smaller area reverse the calculation.

- Larger area / smaller area 31.62 / 22.36 = 1.414
- $354 x 1.414 = $500.56 Adopt $500

The square root of an area is including the 'Shape_Area_sqm' column of the Park network land appraisal model spreadsheet.
ALLOWANCES

Constraints - Trunk Infrastructure Properties

A number of constraints such as flooding, waterways, wetland, slope, easement, and vegetation management areas have been provided based on the constraints data used for the Logan City Population Model. These have been included in the infrastructure spreadsheet (doc id: 6857004). Constraints listed in the spreadsheet apply to individual parcels. In assessing the value for each separate parcel (individual lot on plan) reference has been had to EasiMaps which clearly indicates and allows the estimation of coverage of the constraints listed above. If any parcel is affected by a constraint it is noted and assessed and allowed for on a single lot basis.

Power Easements

Power easements affect properties when they have a particular use such as residential, commercial or industrial due to the fact that the land can not be built on and it is blighted in the market, however if the land is used for other purposes such as park or open space it has little effect and as such was not depreciated.

Constraints Discount

A discount rate outlined in Table 1 reflects the location of the constrained land and the surrounding land value. For example, constrained land in an urbanised location such as Daisy Hill would have a higher value than constrained land in a rural location such as Mundoolun. However, where land is 100% constrained it is considered that the land has no value other than for rural purposes. Therefore a standard rate for constrained rural land is used from the benchmark sales data. For the purpose of this land appraisal assessment the benchmark sale id 6016 was used.

Consequently, the following allowances have been applied to account for individual properties which have been affected by constraints (Table 1).

Table 1: Allowances for Constrained Land

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<th>Coverage Over Property %</th>
<th>Discount %</th>
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<tr>
<td>10</td>
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</tbody>
</table>

Note: In the assessment of future 'investigation' parks, no constrained discount was applied acknowledging some level of uncertainty in the precise location of land required for future park.
Definitions

Analysed Sale Value (ASV):

To arrive at the ASV any improvements such as clearing, shaping or the added value of structures is assessed and deducted from the sale price to arrive at the unimproved value.

It is standard procedure that when arriving at a land value for a property it is preferable to use vacant or lightly improved sales as there is little that affects the overall sale value, in short "value like with like".

Usually small lot residential sites are cleared and shaped. Improvement costs that are used in the analysis of residential sales such as clearing and shaping are derived from the market and are sourced from developers. Generally, having regard to larger home sites the land is selectively cleared with the larger trees remaining with only the immediate area around the dwelling and structures cleared, which result in little difference in these costs when comparing a 1 to a 4 hectare parcel.

A further allowance of up to 5% was applied to the analysed value to take into account any unforeseen cost or improvement.

Benchmarks:

Describe typical residential properties in all residential areas in Logan City. They indicate what the market is prepared to pay for a particular property with regard to its location or size.

Englobo:

Refers to land that is suitable for development either currently or in the near future. An example of this is land that is located within rural or Investigation zones, which are most likely capable of being rezoned to a higher use.

The rate per reflects the risks of gaining a development approval from Council. Land in an established residential location surrounded by or adjoining established residential reflects a higher rate per square metre in the market than a parcel that is on the edge of development which may have some risk of approval or approval with special conditions. (See worksheet 'Sales_Data_08_09' doc id: 6857004).

Land use criteria:

Refers to how the property is identified by DERM and valued accordingly under the Valuation of Land Act 1944, and considers the various sections such as S17 (land used exclusively for residential or primary production), which disregards any potential of the land.

Land use 01 - vacant urban lot
Land use 04 - vacant large lot
Use 05 - improved with a dwelling and valued under S17
Land Use 06 - where land is improved with an outbuilding not covered under S17
Land Use 60 to 89 - land used exclusively for primary production purposes under S17
Section 25 refers to land in subdivision where multiple parcels are valued as a single lot.

Note: In some cases Land use 04 and 05 in residential areas could be developable land.

Locality:

The locality of a parcel reflects the suburb where it is located. For the purposes of the appraisal, the suburbs with similar characteristics were adopted where comparable sales data did not exist.

Residential Sale:

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MANOLAS/MANOLAS
Describes property sales that has been investigated and analysed, and depending on circumstances could be either a home site or reflect a higher use. As the sale reflects a market level constraints and allowances will be applied if applicable (See worksheet 'Sales_Data_08_08' doc id: 6857004).

Rural Sale:
Describes land that is either zoned:
- Conservation, Rural, Open Space, Non Urban,
- Fully flooded or flood prone
- Used for rural purposes such as primary production, cultivation or cane land
- Uncleared moderate to steep sloping broken forest
- Land that was bought by Council on the open market for Parkland,

The value of the sale property reflects the market assessment of its potential, constraints and disadvantages and as such if used as a comparable sale to value an infrastructure parcel no further allowances are used in arriving at the value (See worksheet ‘Sales_Data_08_09’ doc id: 6857004)

Sub Market Area (SMA):
Refers to a locality or like suburb, which are reasonable homogenous having regard to location, zoning, topography and closest to services and access roads. Under Mass Appraisal guidelines a ‘like’ SMA can be used when there is no comparable evidence in one locality.

Signed: ___________________________ Date: 8/11/10

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