



GDS Associates, Inc.
Engineers and Consultants

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Charles Loy
Principal

February 26, 2013

Ms. Carol Zieben, Owner
Douglas Utility Company
32 E Rivercrest Drive
Houston, TX 77042

Re: **Douglas Utility Company Trending**

Dear Ms. Zieben:

GDS was asked to provide asset trending for Douglas Utility Company. Douglas Utility Company provided a test year end date of 06/30/12. Douglas Utility Company also provided an inventory list of assets with install dates and replacement cost values. We used this information in our GDS Asset Valuation Model to compute useful life, years in service at test year end date, trended original cost, annual depreciation expense, total accumulated depreciation, and net book value at test year end date for each asset. Because we were only provided with a year for install date for each asset, we made the assumption that all assets were installed at mid-year on July 1 of the year of installation.

A trending study is a computational methodology used to develop a reliable value of utility plant for different times. If the value of an item is known at any point in time, trending indices can be used to estimate its value at any other point in time. One normally begins a trending study with a replacement cost of an item for a point in time and, with trending indices from that point in time and from the time the item was installed, computes a value at the time of installation, a substitute for the original cost of the item. The purpose of this trending study is to provide Douglas Utility Company with a computation of the value of the original cost for existing plant so that the original cost can be depreciated to the net plant value for the end of the test year.

A trending study is based on two key items, the replacement cost and construction cost indices. The replacement cost is the current price for installing the same item new and is a purchase price or contractor's price for an item based upon materials, equipment, and labor used. Construction price indices are maintained by various organizations that monitor construction pricing over time. For the construction industry as a whole, ENR (formerly Engineering News Record) maintains both a construction cost index and a building cost index. For the utility industry, Electric, Gas and Water, the Handy Whitman Index maintains indices based upon capital items using a utility chart of accounts. Government agencies, such as the U.S. Bureau of Reclamation also maintain construction cost indices. Each of these indices provides an index number for different times. If one knows the cost of an item at any point in time, construction

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cost indices can be used to reliably estimate the cost at another point in time. Thus, current costs can be used to estimate original cost using an index value for the date of installation.

The GDS Asset Valuation Model uses three indices of construction costs to estimate trended original cost: (1) Handy Whitman Index of Water Utility Construction Costs for the South Central Region (Region 4); (2) the ENR (formerly Engineering News Record) Index of Building Cost and Construction Cost Trends; and (3) the Bureau of Reclamation Construction Cost Trends. The Handy Whitman Index was the primary reference source used for this trending because utility regulators and the industry routinely accept it. The Handy Whitman Index is commonly used in Texas ratemaking dockets. The Handy Whitman Index has been reporting values since 1912. The Handy Whitman Index has reported values on January 1 and July 1 for each year since 1973 and reported annual values before 1973. The Handy Whitman indices are designed to estimate reproduction and original costs. For sewage treatment plants, we use the Building Cost Index of ENR, as we have found it to be the most suitable alternative when the Handy Whitman Index is not applicable. We prefer the ENR Building Cost Index to the ENR Construction Cost Index because we believe it is based upon features more accurately applied to sewage treatment plants and because it has a slightly lower inflation rate. The ENR Building Cost Index has been reported since 1915 and currently reports monthly values. We also use the U.S. Bureau of Reclamation Construction Cost Trends Index because it covers land costs, electrical equipment, and other specialized items not covered by the Handy Whitman Index and the ENR Building Cost Index. The U.S. Bureau of Reclamation Index has been reported quarterly since 1940. We have used the most appropriate index for each inventory item and used the index value for the nearest reported date.

Service lives and depreciation rates were determined using recommended service lives from TCEQ. These rates were used to compute the annual depreciation expense and the total accumulated depreciation on the purchased assets. Depreciation was computed and subtracted from the trended value of original cost to determine net book value.

The attached reports included the trended value of assets for the Water Treatment Plants # 1 and 2 as well as the Sewer Treatment Plant at Douglas Utility Company. We believe that our computations have produced appropriate values for net book value.

Sincerely,



Chuck Loy

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Summary

Company: Douglas Utility Company
 Subd Name: Sewer Treatment Plant

Utility Asset Valuation
 Sewer Treatment Plant

GDS Associates, Inc.
 Printed: 2/26/2013

| Item No. | Account No. | Account Name | Asset Description | Unit | Approx. Quantity | Unit Price | Replacement Cost | Date Installed | Useful Life | Years in Service at Test Year End Date 6/30/2012 | Actual or Treaded Original Cost | Annual Depreciation Expense | Total Accumulated Depreciation | Net Book Value at Test Year End Date 6/30/2012 |
|----------|-------------|---|--|------|------------------|------------|------------------|----------------|-------------|--|---------------------------------|-----------------------------|--------------------------------|--|
| 1 | 360.0 | Collection System - Gravity Flow Lines | 8" Line, 3,925' (\$28.00 per foot) | FT | 3,925 | \$28.00 | \$109,900.00 | 07/01/61 | 50 | 51 | \$29,945.50 | \$598.91 | \$29,945.50 | \$0.00 |
| 2 | 360.0 | Collection System - Gravity Flow Lines | 10" Line, 140' (\$36.00 per foot) | FT | 140 | \$36.00 | \$5,040.00 | 07/01/61 | 50 | 51 | \$1,373.30 | \$27.47 | \$1,373.30 | \$0.00 |
| 3 | 360.0 | Collection System - Gravity Flow Lines | 6" Line, 2,585' (\$23.50 per foot) | FT | 2,585 | \$23.50 | \$60,748.00 | 07/01/61 | 50 | 51 | \$16,552.59 | \$331.05 | \$16,552.59 | \$0.00 |
| 4 | 360.0 | Collection System - Gravity Flow Lines | 8" Line, 980' (\$28.00 per foot) | FT | 980 | \$28.00 | \$27,440.00 | 07/01/61 | 50 | 51 | \$7,476.84 | \$149.54 | \$7,476.84 | \$0.00 |
| 5 | 380.0 | Wastewater Treatment and Disposal Equipment | Wastewater Treatment Plant (380,000 GPD) | GPD | 380,000 | | \$2,280,000.00 | 07/01/86 | 25 | 26 | \$1,102,073.50 | \$44,082.94 | \$1,102,073.50 | \$0.00 |
| 6 | 380.0 | Wastewater Treatment and Disposal Equipment | Chlorinator & Scales | EA | 1 | | \$7,200.00 | 07/01/08 | 20 | 4 | \$5,991.00 | \$299.55 | \$1,197.38 | \$4,793.62 |
| | | TOTAL - SEWER TREATMENT PLANT | | | | | \$2,490,328.00 | | | | \$1,163,412.73 | \$45,489.45 | \$1,158,619.11 | \$4,793.62 |

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Reconciliation and Land Value Conclusion

After considering the all of the land sales, the land value for the subject tracts is calculated as follows:

| LAND VALUE SUMMARY | | |
|---------------------------|----------------------|-------------------|
| Land Area | Land Value/SF | Land Value |
| 49,571 | \$2.00 | \$99,142 |
| 11,717 | \$1.00 | \$11,717 |
| 4,550 | \$1.00 | \$4,550 |
| | Total: | \$115,409 |
| | Rounded: | \$120,000 |

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