



City Council Agenda Item Request Form

This form is required to be completed by the applicable deadline for placement of an item on the City Council Agenda.

Date: 12/4/2025

Department Making Request: 30 - Public Works

Person Making Request: Dinh Ho, P.E.

Item Type: Agreement

Budgeted? YES

Cost: 35870

If budgeted, identify account:

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Short Description:

The City proposes to enter into an agreement with Nelissa Heddin Consulting, LLC to perform a comprehensive Water and Sewer Rate Study.

Explanation/Justification Details:

The purpose of the study is to evaluate current rates, operational costs, long-term capital needs, and financial sustainability of the water and wastewater utility system. This study will ensure that rates remain fair, equitable, and sufficient to support ongoing operations and future infrastructure needs.

The scope of the study includes:

- Review of operational and maintenance costs.
- Analysis of current customer classes and usage trends
- Evaluation of system depreciation, capital improvement requirements, and debt serviceC
- Comparison with regional utility rate structures
- Development of rate scenarios and recommendations
- Presentation to City Council

The agreement amount is \$35,870, which is consistent with typical municipal utility rate evaluation costs.

Attached is the proposal along with Ms. Heddin along with her qualifications.

Requestor Signature:

Dinh Ho, P.E.

This section to be completed by City Secretary, City Attorney, and City Manager's Office only:

Legal Review is complete, legal documents are prepared:

City Attorney

Item is approved for placement on Council Agenda:

City Manager

Item is scheduled for placement on the

Council Agenda.

City Secretary

Professional Proposal

City of Iowa Colony, Texas

**Water & Wastewater Utility
Cost of Service and Rate Design Study Proposal**

November 7, 2025

Nelisa Heddin Consulting, LLC
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Lakeway, TX 78734
(512) 589-1028
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EXECUTIVE SUMMARY

Nelisa Heddin Consulting, LLC (NH Consulting) is pleased to provide the City of Iowa Colony (“City”) with a proposal for Water and Wastewater Utility Rate Consulting Services. NH Consulting will work with the City to develop rate recommendations which will assure adequate revenues for operations and capital improvements on a self-sustaining basis, while considering the economic impact on the Utility’s customers, taking into consideration the cost of providing the services. ***NH Consulting offers the City of Iowa Colony unparalleled expertise in the performance of cost of service and rate design analysis.***

NH Consulting is a financial and management consulting firm specializing in meeting the needs of municipal utilities.

NH Consulting intends to provide the City with a comprehensive package of services intended to enable the City to more efficiently manage its utilities and fully evaluate the City’s utility rate structure.

The following proposal identifies the project team’s qualifications and outlines our approach to the project.

The project team believes that the successful completion of this project will be dependent on the following requirements:

- A project manager who clearly understands the City’s operating environment including long-term and short-term goals and is committed to helping the City identify strategies to achieving those goals
- A project manager who is committed to providing value-added services to the City that go beyond simply the performance of a rate study, but assisting the City in planning for the future of its Utilities
- A project manager who is experienced in the performance of and specializing in cost of service and rate design studies for numerous entities throughout the U.S and is a recognized expert in the industry having testified before the State Office of Administrative Hearings and the State Legislature
- Responsiveness and constant communication with the City

As outlined in this proposal, NH Consulting is uniquely qualified to meet each of these requirements.

NELISA HEDDIN CONSULTING, LLC PROFILE

NH Consulting is a management consulting firm specializing in the financial planning and management of municipal utilities. NH Consulting works closely with each client to develop strategic, individualized solutions. We provide a full range of services to meet our clients' complex needs including cost of service and rate design studies, impact fee analysis, and budgeting assistance.

NH Consulting works closely with each client to thoroughly understand their unique needs, goals, issues and challenges and develops strategic solutions customized to address the individualized needs of each client.

Services provided by NH Consulting include:

- Cost of Service and Rate Design Studies
- Comprehensive Fee Analysis
- Indirect Cost Allocation Studies
- Impact Fee Analysis
- Pro Forma Analysis
- Bond Issuance Support
- Annual and Long Term Operational Budgeting
- Cost Benefit Analysis
- Comparative Benchmarking Analysis
- Financial Planning and Modeling
- Financial Planning and Modeling
- Financial Planning and Budgeting for CIP Programs
- Public Education Programs
- Service Area Valuations
- Feasibility Analysis
- Regionalization Planning and Implementation
- Expert Witness Testimony
- Legislative Support
- Billing System Reviews and Implementation

Strategic – Innovative - Excellence

Nelisa Heddin, president of NH Consulting, is Past Chair of the Texas AWWA Rates and Charges Sub-Committee, and is still actively involved in this professional organization. Ms. Heddin brings the most innovative solutions in the industry to each of her clients – allowing her to develop customized strategies to meet each of her clients needs.

PROJECT TEAM PROFILE

NELISA HEDDIN, PROJECT MANAGER

Ms. Heddin will serve as the project manager for this engagement, bringing over 25 years in utility rate design to this engagement. Ms. Heddin will be performing the financial analysis and will responsible for the overall quality control for this engagement.

Ms. Heddin is an industry expert in financial planning and management for municipal utilities, specializing in cost of service and rate design studies, impact fee analysis, cost benefit analysis, and annual and long-term budgeting. Ms. Heddin has over 25 years experience in providing consulting services to utilities of all sizes throughout the Southwest. She is a Past-Chair of the Texas AWWA Rates and Charges Sub-committee and has been invited to speak at numerous industry functions regarding cost of service issues, rate design, water loss and capital financing.

Expertise You Can Rely On – Quality You Can Trust

NH Consulting assigns a single project manager who services as project manager and analyst for each engagement – this ensures continuity throughout each engagement. Nelisa Heddin, the proposed project manager for this engagement, is a leading expert in cost of service and rate design studies, having worked for entities across the United States such as the Cities of Dallas, Phoenix, Tucson, Little Rock, Webster, Pflugerville, and Georgetown.

Nelisa Heddin

President

Professional Background

Nelisa Heddin is an industry expert in financial planning and management for water and wastewater utilities; specializing in cost of service and rate design studies, impact fee analysis, cost benefit analysis, and annual and long-term budgeting. Ms. Heddin has over 25 years experience in providing consulting services to utilities of all sizes throughout the Southwest. Ms. Heddin has a Masters of Business Administration with a specialty in Finance. She is a Past-Chair of the Texas AWWA Rates and Charges Subcommittee and has been invited to speak at numerous industry functions regarding water and wastewater rates, rate design, water loss, and capital financing.

Education

B.S., Biology, New Mexico State University, 1996
MBA, Finance, New Mexico State University, 1999

Professional Affiliations

American Water Works Association
Past Chairman Texas AWWA Rates and Charges Subcommittee
Texas Municipal League
Texas Government Financial Officers Association

Sample of Relevant Project Experience

Cost of Service and Rate Design Projects

Bistone Municipal WSC	City of Moulton, Texas
City of Alamo Heights, Texas	City of Murphy, Texas
City of Bastrop, Texas	City of New Madrid, Missouri
City of Bonham, Texas	City of North Lake, Texas
City of Burnet, Texas	City of Pecos, Texas
City of Cameron, Texas	City of Pflugerville, Texas
City of Copperas Cove, Texas	City of Phoenix, Arizona
City of Corinth, Texas	City of Richmond, Texas
City of Cuero, Texas	City of Selma, Texas
City of Del Rio, Texas	City of Southside Place, Texas
City of Friendswood, Texas	City of Sweet Water, Texas
City of Garland, Texas	City of Webster, Texas
City of Gladewater, Texas	City of Wortham, Texas
City of Horseshoe Bay, Texas	Eldorado Area WSD
City of Idabel, Oklahoma	Fair Management, LC
City of Krum, Texas	Gorforth SUD
City of Lago Vista, Texas	La Ventana Utilities
City of Leon Valley, Texas	MB Wastewater Services, LLC
City of Little Rock, Arkansas	Quail Valley Utility District
City of Lindale, Texas	Southern Crossing Utilities
City of Mexia, Texas	Travis County WCID #17
City of Midland, Texas	West Travis County Public Utility Agency
City of Missouri City, Texas	Whiterock Water Supply Corporation

Impact Fee Studies

West Travis County Public Utility Agency	City of Burnet, Texas
City of Southside Place, Texas	City of Corinth, Texas
City of Cuero, Texas	City of Missouri City, Texas
City of Bastrop, Texas	

Valuation Analysis

Central Texas UDC	U.S. Navy	Green Valley SUD
West Travis County Public Utility Agency	City of Dallas, Texas	City of Fort Worth, Texas

Operations and Management Reviews

Quail Valley Utility District	City of Bastrop, Texas	City of Gladewater, Texas
City of Waco, Texas	City of Uvalde, Texas	City of Galveston, Texas

Other Projects

Central Texas UDC - Facilities Acquisition Negotiations	City of Bee Cave - Litigation Support and Expert Witness Testimony
City of Georgetown/ Chisholm Trail SUD - Regionalization Feasibility	La Ventana - Litigation Support and Expert Witness Testimony
City of Georgetown - Contract Assignment Consents	White Bluff Rate Payers - Litigation Support and Expert Witness Testimony
City of Lakeway – Review of Utility Rates of Lakeway MUD	Canyon Lake Rate Payers – Litigation Support and Expert Witness Testimony

Publications and Presentations

Texas H2O, November/December 2004, “Finding the Water: How to Cope with HB3338”
Office of Rural Community Affairs, 2004 – Water Related Training for Local Leaders
Texas Water, 2004 – Professional Paper - Water Audits, Water Loss and HB3338
Texas Rural Water Association Annual Conference 2002– Presentation – Encroachment Issues
Incode Education Forum, 2007 – Selling Utility Rate Studies
Texas Water, 2006 – Water Loss Determination
Munis Education Forum, 2006 – Utility Rate Analysis
Incode Education Forum, 2006 – Utility Rate Analysis
TAWWA Rate Seminar, 2010 - Utility Rate Analysis
GFOAT, 2005 – Capital Financing Seminar
GFOAT Gulf-Coast Chapter, 2005 – Presentation – The GFO’s Water Challenges

PROJECT APPROACH

Analysis of Water Fund Finances and Water Rates

“Inflation and resulting cost impacts on water utility customers, as well as increased public awareness of the need for conservation and more effective use of natural resources, together with the need to provide proper price signals, have challenged utility managers to continue providing high-quality service to water utility customers on an equitable and fair cost basis.”¹ There are many State and Federal regulations surrounding water and wastewater rates. Chapter 13 of the Texas Water Code states, “rates shall not be unreasonably preferential, prejudicial, or discriminatory but shall be sufficient, equitable, and consistent in application to each class of consumers.” Special care must be taken during the development of water and wastewater rates to ensure that the rates developed are in accordance with this statute.

NH Consulting utilizes a cost of service rate design methodology, called the base-extra capacity method, which is endorsed by the American Water Works Association (AWWA). “The AWWA Rates and Charges Subcommittee does not endorse any substantial departure from cost-of-service based rates to achieve social objectives.”¹ The AWWA emphasizes the importance of using sound cost-of-service principles while setting rates.

The development of water rates utilizing the base-extra capacity method involves four primary steps:

1) Determination of Annual Revenue Requirements for the Study Period

It is particularly important that all costs associated with providing service are included in the revenue requirement. This includes direct costs such as those required to pump and treat water, as well as indirect costs such as allocations for administrative overhead incurred by other City departments. It is imperative that the costs included in the revenue requirements are within the confines of State and Federal regulations.

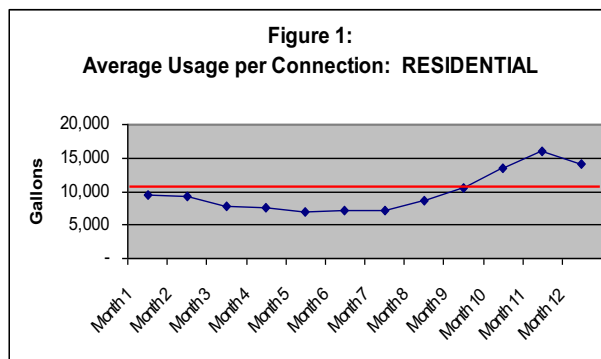
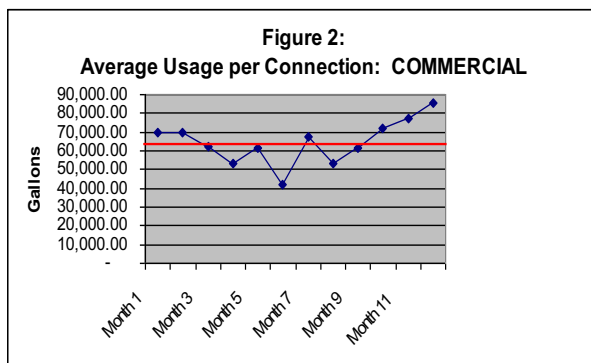
There are two primary approaches to the development of revenue requirements, the “cash-needs” approach, and the “utility” approach. The “cash-needs” approach ensures that the revenues generated by the utility cover the cash needs of the utility, including debt obligations, as they come due, whereas the “utility” basis does not consider debt obligations. The primary difference is that the “utility” basis considers depreciation rather than debt. NH Consulting will work closely with City staff to determine the approach which is most appropriate in meeting the City’s needs.

2) Functionalize Revenue Requirements into Cost Components

Chapter 290 of the Texas Administrative Code outlines strict guidelines that the water utility must abide by while providing retail water services. These guidelines outline specific requirements for items such as minimal system capacities. Thus, the City must maintain the infrastructure to meet these requirements. Infrastructure capacity requirements are determined by the number of connections that the system serves, and the size of each connection as well as the usage patterns of those customers. Water utilities are designed to handle times of peak usage, such as summer months when residents are irrigating heavily.

¹ American Water Works Association M1 Manual, Water Rates, Fourth Edition, 1991.

Even though the utility may have average usage at a certain level, it must have the capacity to serve customers at a level that is much greater, in order to meet peaking demands. Figures 1 and 2 demonstrate different usage patterns of residential and commercial customers that may occur on a water utility.



According to the AWWA, “a water utility is required to supply water in total amounts and at such rates of use desired by the customer. A utility incurs costs in relationship to the various expenditure requirements caused by meeting those customer needs. Since the needs for total volume of supply and peak rates of use vary among customers, the costs to the utility of providing service also vary among customers or classes of customers.”² In other words, there are significant cost implications to the ability a utility system must have to meet peaking patterns. Therefore, one must have an in-depth understanding of the Utility’s expenses in order to allocate them properly into functional cost components.

NH Consulting uses a base-extra capacity methodology to functionalize costs into the following components, as defined by the AWWA in the M1 Manual:

- **Base Costs** – costs that tend to vary with the total quantity of water used plus those O&M expenses and capital costs associated with service to customers under average load conditions, without the elements of cost incurred to meet water use variations and resulting peaks in demand.
- **Extra Capacity Costs** – costs associated with meeting rate-of-use requirements in excess of average and include O&M expenses and capital costs for system capacity beyond that required for average rate of use.
- **Customer Costs** – those costs associated with serving customers, irrespective of the amount or rate of water use.
- **Direct Fire Protection Costs** – those costs that are applicable solely to the fire-protection function.

3) Allocation of Cost Components into Customer Classes

Special care must be taken in the selection of customer classifications. In setting customer classes, one must consider service characteristics, demand patterns, and whether service is provided both inside and outside city limits. Customers grouped in the same classification must utilize water for similar purposes and in similar patterns.

The utilization of the base-extra capacity methodology requires an in-depth analysis of customer usage patterns in order to gain a thorough understanding of the demand factors imposed by each customer classification. While setting appropriate customer classifications, the customer’s average and peak usage must be examined.

The ultimate goal of the customer usage analysis is to distribute cost components (base costs, extra-capacity costs, customer costs, and direct fire protection costs) to customer classes based on their specific usage patterns.

² American Water Works Association M1 Manual, Water Rates, Fourth Edition, 1991.

4) Design Water Rates

Water rate design is often a daunting and complex task. The primary consideration is to recover from each customer class, within practical limits, the cost to serve that customer class. However, special care must be taken to ensure that rates are equitable among customer classes, and that customers do not experience “rate shock” because of the new rate structure. In addition, it is important to realize that there are many political and policy influences on the rates charged by a water utility. Water rates must also send appropriate pricing signals to the utility’s customers. Many rate options exist, including: Minimum bill by meter size; Minimum bill by customer class; Volumetric rate by meter size; Volumetric rate by customer class; Conservation rates; Inclining block rates; Declining block rates; Uniform block pricing; Conservation incentives; Marginal cost rates; Unmetered rates; Direct fire-protection rates. The goals of the individual utility must be taken into consideration while evaluating each water rate option.

Analysis of Wastewater Fund Finances and Wastewater Rates

The determination of wastewater rates is accomplished through a similar approach. The four primary steps that are required in wastewater rate analysis are as follows:

1) Determination of Annual Revenue Requirements for the Study Period

The determination of wastewater revenue requirements is accomplished in the same manner as the water revenue requirements. NH Consulting will use the “cash-needs” basis for determination and will project costs into the five-year study period accounting for known and measurable changes and inflationary influences.

2) Functionalize Revenue Requirements into Functional Cost Components

Just as the water costs that the utility incurs are related to the demand the customers put on the water system, wastewater costs are related to the flow and strength of the wastewater returned to the system. The wastewater treatment process is dependent on both the strength of the wastewater and the volume of the wastewater treated. Thus, costs are related to these factors. Wastewater revenue requirements must be functionalized based on:

- **Flow Costs**– Costs incurred by the wastewater utility that can be directly related to the volume of wastewater treated. These costs include pumping costs and wastewater treatment plant capacity.
- **Strength** – Costs incurred by the utility that can be related to the strength of the wastewater treated, such as chemical costs. Strength costs can be further functionalized in terms of BOD, TSS, and NH₃, depending on the facility’s specific permit treatment parameters.
- **Customer Costs** – those costs associated with serving customers, irrespective of the amount or rate of wastewater treated.

3) Allocation of Cost Components into Customer Classes

The functionalized wastewater costs are then allocated to customer classes based on projected flow, and, in the case of surcharge design, strength.

4) Design Wastewater Rates

The design of wastewater rates is a complex task. This is due to the fact that most utilities do not meter wastewater, as they do water. Thus, best estimates must be made during the determination of billing units. This is a particularly sensitive task. It is imperative that a utility normalize the historical data to ensure they do not over-estimate billing units. Additionally, the City must adopt a policy for the determination of wastewater billing. Options include winter averaging and maximum fee capping. Another consideration in setting wastewater rates is the option of wastewater surcharges for industrial customers.

WORK PLAN

The Project Team has put together a work plan that accomplishes the four steps of rate design and accomplishes the goals/objectives outlined by the City. NH Consulting's general approach to rate design is to first thoroughly understand the goals of the Utility and design rates which meet those goals. The Project Team will discuss rate design options and project goals with the City in a kick-off meeting, which will set the tone and direction of the project.

Task Number	Task Name	Description	Deliverable (if any)
1	Revenue Requirement Determination	Development of Revenue Requirements for the base-year utilizing historical actual costs, City budgets, debt service schedules, capital improvement plans and information/input from City staff.	Detailed schedule outlining the base-year revenue requirement and the basis of development, assumptions, and adjustments will be provided to and reviewed with City staff in a work-paper document. Base year revenue requirements will be relied upon to develop five-year revenue requirements.
2	Allocation of Revenue Requirements Between Utilities	Base-year Revenue Requirements will then be allocated between the utilities based upon a variety of cost-causation factors. NH Consulting will rely upon input from City staff to ensure appropriate allocations have been made.	A detailed schedule which allocates the Revenue Requirements between the three utilities and the allocation factors utilized for each line-item will be identified and provided to City staff in a work-paper document. The project team will seek approval of the allocations. The results of this analysis will be incorporated into the five-year Revenue Requirement projections for each utility.
3	Development of Five-Year Revenue Requirement Forecast	Once the base year revenue requirements for the test year have been developed, NH Consulting will work with City staff to develop a five-year projection of revenue requirements for each utility. Known and measurable changes such as capital improvements, future debt issues and process changes, will be taken into account. The project team will work closely with City staff project these costs into the five-year planning period considering elements including, but not limited to, inflation, personnel changes, growth impacts, etc. Existing costs will be determined as well as the costs for the proposed CIP. O&M reserves repair and replacement reserves and debt service reserves will be established to	Detailed schedules outlining the five-year projection and the basic assumptions used to make those projections. These schedules will likely be included in the final report of the study.

4	Functionalization of Revenue Requirements	coincide with the City's financial policies.	
		Once revenue requirements have been determined and projected for the five-year study period, NH Consulting will functionalize each cost component into functional categories, based on that cost. Cost components for the water utility will be further functionalized into base, extra-capacity, and customer cost categories. Wastewater components will be functionalized into flow, treatment, and customer cost categories.	Cost functionalization work-paper schedules will be reviewed with City staff and will be relied upon for the allocation of costs to customer classes.
5	Customer Demand Analysis	NH Consulting will next examine the historical usage patterns of the City's current customer classes and will evaluate possible new customer classifications.	Historical customer demands, average use, and peaking patterns will be provided to City staff in detailed work-papers for review and incorporation into the customer cost allocations and future use projections.
		NH Consulting will examine the usage patterns of the customer classes to determine their average and peak usage. The customer demand analysis is not only useful in cost allocations, it also enables the utility to make future revenue projections, as well as serve as a tool in water resource planning. In addition, NH Consulting will use this analysis to review the City's current customer classifications as to appropriateness.	
6	Customer Count and Demand Projections	The next step in the analysis is to project future customer growth. NH Consulting will examine historical growth patterns, and discuss future growth with the City's utility and planning departments to make this projection. In addition, NH Consulting will analyze historical usage patterns and customer growth projections to project usage for the five-year study period.	Future projections of customer count and demands will be reviewed with City staff. The final report will summarize these projections and the basic assumptions utilized in making these projections.
7	Allocation of Cost Components to Customer Classes	Once NH Consulting has accurately functionalized costs into cost components and has analyzed customer demands, NH Consulting will be able to allocate costs to customer classes based on their usage patterns, and thus relative demands they place on utilities.	Detailed work-papers allocating costs to customer classes will be reviewed with City staff. The final report will summarize the results of the cost allocation analysis.

8	Rate Design	The previous steps have allocated costs to customer classes based on their system demands and have projected customer demands, and thus billing units, into the future. The final step of the analysis is to design rates for the utilities. NH Consulting will first determine cost-of-service based rates for each customer class. Additionally, NH Consulting will provide alternative rate design options if deemed necessary. The ultimate rates recommended by the project team will be fair and equitable among customers; fully recover the costs associated with providing services; and will meet the goals of the City as defined in the project kick-off meeting.	The final rate design work papers will be reviewed with City staff. The recommended rate design will be incorporated into the final report.
9	Preliminary Draft Report	NH Consulting will prepare a preliminary draft report for the City that discusses the methodology used during the analyses, the critical assumptions made by the project team, and findings and recommendations. The project team will present the draft report to City staff for comment.	A draft report will be provided to City staff for comment/edits. Unless otherwise requested by the City, the draft report will be provided in an electronic, PDF format.
10	Issuance of Final Report	NH Consulting will incorporate the City's comments into the draft report, and will issue a final report to the City. This report would include an executive summary, which documents the findings and recommendations in a clear and concise manner.	The project team will provide the City with the final report.
11	Presentation of Findings	NH Consulting will present findings in up to two regularly scheduled or special called meetings/workshops or public hearings. The project team will educate the Council and/or the public on the methodology, findings, and recommendations of the project.	NH Consulting typically presents findings with a Power-Point presentation, or similar format as deemed appropriate.

Proposed Fees

NH Consulting proposes to perform the services described herein for a guaranteed-not-to exceed fee of \$35,870, plus out of pocket expenses. The City would be billed monthly based upon percentage of completion, with the final payment to be due upon delivery of final report and presentation of findings. The project budget and scope of services presented herein reflect the project team's understanding of the City's specific needs. ***The project team is willing to negotiate price based on an adjusted scope of services to meet the City's specific needs and budgetary limitations if deemed necessary.***