



City of Nevada City  
317 Broad Street  
Nevada City, CA 95959  
(530) 265-2496

November 18, 2022

*Via hand delivery*

Desiree Belding, CPPO, CPPB  
Nevada County Purchasing Division  
950 Maidu Ave.  
Nevada City, CA 95959

Re: *Regional Infrastructure Planning Study ~ Proposal from the City of Nevada City*  
*RFP No. 160639*

Attachments:

- Digital copy of Nevada City's proposal package for the Regional Infrastructure Planning Study

Dear Desiree,

The City of Nevada City is pleased to submit our proposal in response to RFP No. 160639 for Regional Infrastructure Planning Study (incl. Addendum 1). As further described in the proposal, the City is requesting \$60,000 of funding for water and wastewater modeling. The purpose of the modeling would be to 1) simulate existing conditions and identify problems or deficiencies and 2) determine what improvements can be made to support new future housing units.

As City Manager, I am authorized to submit this proposal in conformance with the provisions described in the RFP. If this proposal is accepted, City staff present the contract to the City Council of the City of Nevada City with a recommendation to enter into a binding contract with the County of Nevada.

Thank you for consideration of this request. If you have any questions or request additional information, please contact me at City Hall at (530) 265-2496 x119 or [sean.grayson@nevadacityca.gov](mailto:sean.grayson@nevadacityca.gov).

Sincerely,

**CITY OF NEVADA CITY**

Sean Grayson  
City Manager

## TAB A: Jurisdictions Qualifications

### Introduction

Nevada City was first settled during the Gold Rush of 1849 by outside settlers. During this time, the area was referred to as “Nevada” and at other times “Nevada City”. By 1864, the mining town residents formally established the name Nevada City to avoid confusion with the State of Nevada. Nevada City became an incorporated City establishing a local government in 1868 to provide essential services to the community. Since its incorporation, the City’s population has fluctuated, with both periods of rapid growth and declines in population.

Move forward to present day, Nevada City is a full-service city of 3,122 people (2019) with a fairly consistent population since the turn of the century. The essential services provided by Nevada City consist of the following:



- Police Service
- Fire Service
- Wastewater collection and treatment
- Water treatment, storage, and distribution
- Storm drainage collection and disposal
- Parks & recreation

The City is the water service provider for the original 640-acre City boundary and most areas within current City boundary. The remainder of the incorporated City areas and the entire SOI is currently served by Nevada Irrigation District (NID) for treated water. This is in large part due to pressure zones with NID being the service provider for the properties with higher elevations and the City being the service provider for lower elevations.

The City is the only provider for wastewater collection and treatment within the current boundary and for future annexations within the SOI, with the only exception being those properties that are on septic systems. Any future housing development with the SOI or regions surrounding the City would be served by the City due to regulatory requirements and limitations of septic systems.

### Growth and Development

Upon incorporation, the original city townsite consisted of 640-acres. The City’s current jurisdictional boundaries include approximately 1,510 incorporated acres. Surrounding the City are areas where future growth is anticipated in the City’s General Plan and LAFCO sphere of influence (SOI). The current SOI includes approximately 2,100 acres of unincorporated county land which consists of near-term and long-term sphere horizons as well as areas of interest.

The March 1986 Nevada City General Plan is the City’s primary and most comprehensive planning document. In December 2019, the City adopted an updated Housing Element which includes a housing needs assessment, site inventory and

description of constraints. In many ways, the City's planning opportunities and constraints have not changed since they were identified in 1986. The steep topography and heavy tree cover is often undesirable for larger-scale developers to propose mass housing projects. Growth often occurs through small subdivisions with property owners developing single houses. Due to the lack of developer desirability, Nevada City has not grown as much as other cities in the region. However, development pressure is anticipated to grow significantly in the coming decade given the housing crisis declared by the State and the increasing preference of people to live close to commercial, social and entertainment hubs. The City is seeing the largest development in over a decade with the 51-unit Cashin's Field project which is being completed this year. The City anticipates growth to continue occurring both within City limits and within the SOI, explained further in the Study Plan below.

### Purpose of Proposal

For the purposes of this proposal, the City is requesting \$60,000 in funding for a hydraulic model for a water and sewer infrastructure study. The study will help the City to be better prepared for anticipated housing development as follows:

- Modeling the existing and aging water and sewer infrastructure will be used to determine capacity and limits of the existing system
- Modeling with two or more scenarios of planned future growth to determine where pipes, tanks, treatment facilities need to be upsized or modified to accommodate demands for service in specific areas where growth is anticipated
- As the City continues to upgrade and replace its aging pipelines, the City will be able to upsize pipes to accommodate future capacity at a relatively low-cost difference, given that the city is already incurring cost to replace these lines.
- In order to accommodate housing at various income levels, the City would be able to use the model to identify infrastructure improvements projects that may be eligible for State and Federal funding assistance

The City has not received funding for a similar project in the past. The City intends to procure the services of a qualified engineering firm (consultant) to prepare the hydraulic model. City staff will provide all mapping, as-builts, data and documentation to the consultant who would be preparing the hydraulic model. City staff will also prepare the final report and summarize the information prepared by the consultant. Staff time will not be billed to the project. The Consultant will be selected through a public RFP process and the consultant costs for preparation of the hydraulic model is expected to use 100% of the funds that are being requested as part of this proposal. The City will provide matching funds to finance any costs that are in excess of the awarded amount.

## TAB B: Study Plan

### Overview of City's Request

The City requests \$60,000 of funding for hydraulic modelling to support a water and sewer infrastructure study. The model would be used to show planned future growth and corresponding pipe sizes, or other facility improvements needed to accommodate growth in specific areas. It is anticipated that the full amount of the funding request will be used to pay for consultant services to prepare the hydraulic model. City funds will be used to pay for the difference in cost should the modeling cost exceed the amount being awarded as part of this grant request.

City staff will prepare the study using the data from the hydraulic model. The study will include a narrative describing the location and potential number of new housing units that can be accommodated and a summary of specific infrastructure projects (mainline pipe or facility improvements) that can be included in the City's Capital Improvement Plan for implementation. As a match toward the \$60k grant amount being used to pay consultant cost, City funds will be used to pay for staff time in preparing the study.

### Area of Focus for the Study

The area of the study will be the entire City and Sphere of Influence for the hydraulic study. This includes undeveloped or underdeveloped properties within the current City boundary and the SOI. The focus of the study, however, will be the areas listed below that have the largest potential to provide more housing units.

#### Excerpt from 2020 Nevada City Sphere Plan:

*The City has identified six potential development areas in the SOI which could reasonably receive water and sewer service and provide for additional housing. These areas are assumed to have the necessary scale to make sewer extension feasible and reasonably foreseeable. These areas and approximate development densities are listed in Table 3-1, Properties with Reasonable Water and Wastewater Service Potential. Other areas within the sphere that are not included on this list may also receive wastewater service in order to remedy issues with private septic systems, or to provide for more density of land use.*

*It should be noted that actual need for services would be determined as more comprehensive development plans and entitlements are proposed or approved. These projects do not yet have site-specific designs or footprints, and it is not possible to specifically address the environmental concerns at this time. The projects would not be permitted by the City until they undergo site-specific review and City planned project by project CEQA analysis. CEQA analysis would commence upon planning approval of an application or entitlement. None the less, for the purposes of this planning study these projects are considered reasonably foreseeable.*

Property Name	Nevada City General Plan Designation	Acres	Density Ratio	Max Density Potential
Providence Mine East	Estate (E)-PD	126.11	1-3 acre minimum	42-126 units
	Open Space (OS)	13.11	No Density	
Hurst Ranch	E-PD	89.89	1-3 acre minimum	23-89 units
HEW Building	Public (P)	7.25	40 EDU	30-60 units*
Manzanita Diggins			um	40-319 units
	Service Lodging (SL)-PD	39	8 unites/acre	
	OS	79.2	No Density	
Highway 49 Planned Development Area	R-PD	27.11	105-acre minimum	5-27 units
Gracie/Gold Flat	Mixed Residential (MF)	6	8 units/acre	30-181 units
	E	70	1-3 acre minimum	
<b>Total:</b>	--	<b>465.42</b>	--	<b>170-622</b>

Source: City of Nevada City, 2017

\* There is no assigned density for this property because it currently has a "Public" General Plan designation. The density range therefore represents the subject property as well as intervening parcels that would annex with the HEW building.

**Table 3-1: Properties with Reasonable Water and Wastewater Service Potential**

**Providence Mine East** - This undeveloped territory is adjacent to the Nevada City Tech Center at the end of Providence Mine Road and will provide opportunities for the development of workforce/estate housing, trail connectivity and preservation of significant open space. The City expects to conduct a CEQA analysis on the overall development proposal soon. The City has recently been engaged with representatives of the property owner and expects to see a formal project proposal before the end of 2019.

**Hurst Ranch** – Is located adjacent to the southern border of Little Deer Creek Slopes in excess of 20% are prevalent throughout the property. Because of the sensitive resources on the site, staff has indicated that a PD overlay would benefit development of the property to allow flexibility of standards in exchange for creative design that preserves the integrity of the landscape.

**HEW Building** – The HEW building is located on Willow Valley Road and is an existing structure.

**Manzanita Diggins**- Manzanita Diggins is located on the easterly side of Coyote Street and westerly of SR-20. The property is designated in the County General Plan as RES and as SL-PD in the City, which allows for R1 and R2 uses.

**Highway 49 Frontage** – This property is located south of Gold Flat and represents a principle gateway to the City and is in the transition area between the City and Grass Valley. The large parcels south of Granholm Lane are owned by only a few landowners. It is important that this area be developed sensitively because it represents a transition

*from Grass Valley to Nevada City and should maintain community distinction. The adjacent Caltrans facility is presently served by the City for wastewater.*

**Gracie/Gold Flat** – *This property has been under consideration for development since 1999. Project plans are being developed and a CEQA exemption may apply. There are several other parcels nearby that may be suitable to include in this proposed annexation territory. The City will initiate a survey of adjacent parcels upon receipt of an annexation application to determine if there is interest in expanding the annexation territory.*

Excerpt from 2019 Nevada City Housing Element:

Multi-Family Housing Vacant Site Inventory:

*Moderate- And Above-Moderate Income Housing Assumptions: All housing units in the R2 are expected to be developed for moderate income families, which include workforce housing, based on current cost of lot and development costs*

*Lower Income Housing Assumptions: The minimum density in the R-Zone is 16 units per acre, so all development on these vacant sites is expected to be for low- and very low-income households.*

*HOUSING RESULTS: 87 moderate-income housing units and 47 low-income housing units.*

*REALISTIC UNIT CAPACITY: (net increase for R2, R3 zoning): 134 units*

Single-Family Housing Vacant Site Inventory:

*Moderate- And Above-Moderate Income Housing Assumptions: All single-family housing development will be either moderate- or above-moderate income housing based on current cost of lot and development costs. Development capacity conducted for each vacant lot determining potential development density based on lot constraints, zoning and general plan land use designation. Lots with 0.3 acres or less and larger lots prime for subdivision are determined to be allocated for moderate income housing. Lots of more than 0.3 acres determined to be allocated for above-moderate income housing.*

*MODERATE- AND ABOVE-MODERATE INCOME HOUSING RESULTS: 33 moderate-income housing units and 91 above-moderate income housing units.*

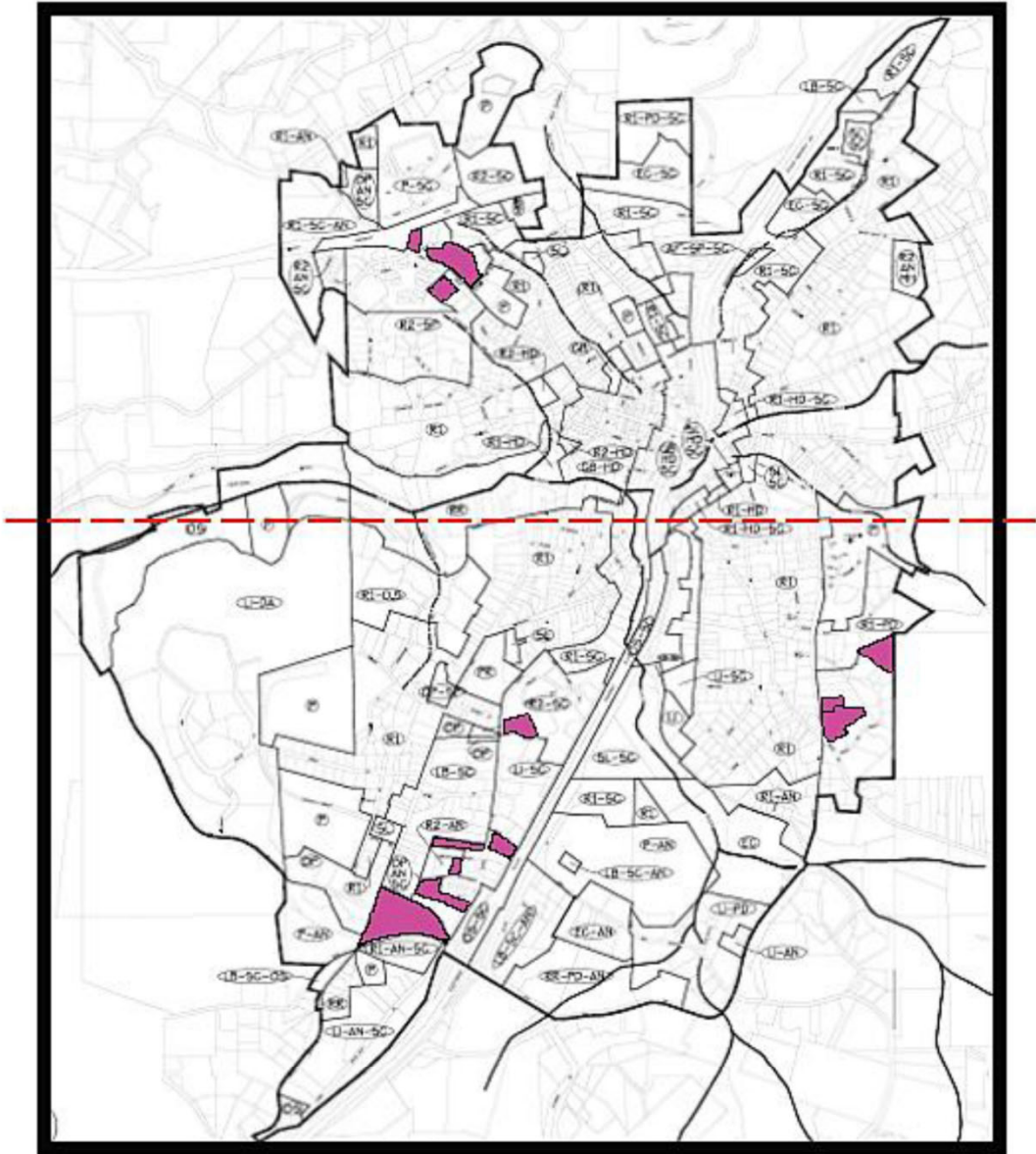
*REALISTIC UNIT CAPACITY (net increase for R1 and RR zoning): 106-112 units*

In summary, the focus of the Study Area will be locations where additional housing units are anticipated within City limits (106-112 single-family units and 134 multi-family units); and the within the SOI (170-622 units of varying housing types).

The Hydraulic Model will include 'Existing Condition'; 'Future Development Scenario 1' for buildout of sites within the City that are greater than 0.5 acre (see Fig. 4.00-1 and 4.00-2 from the Housing Element); and 'Future Development Scenario 2' which will include future buildout of properties within the SOI (Fig 5-1). The model may also be used to show other development scenarios that may be identified by City staff during preparation of the study.

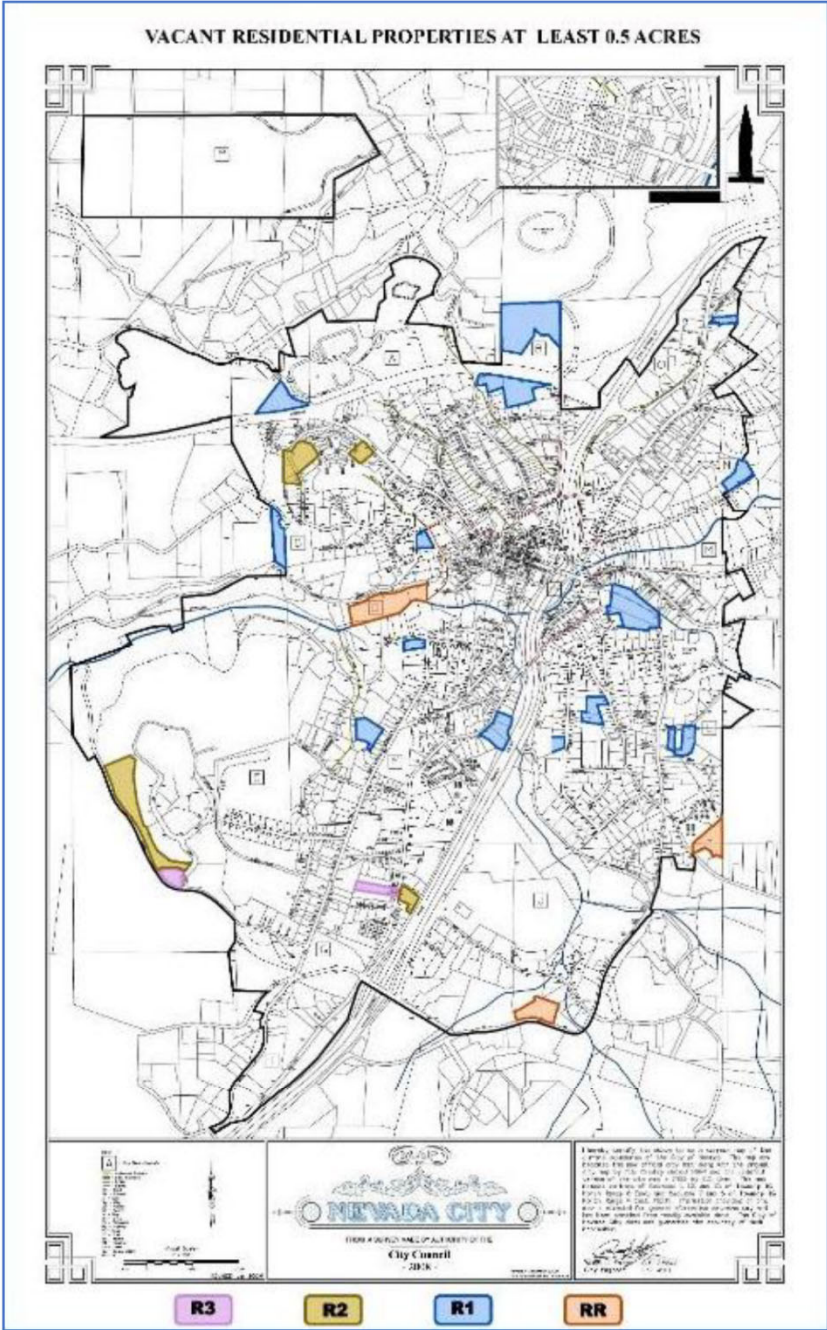
SECTION 4.00 – SITE INVENTORY AND ANALYSIS AND ZONING

FIGURE 4.00-1. MULTI-FAMILY EXISTING SITES – KEY MAP

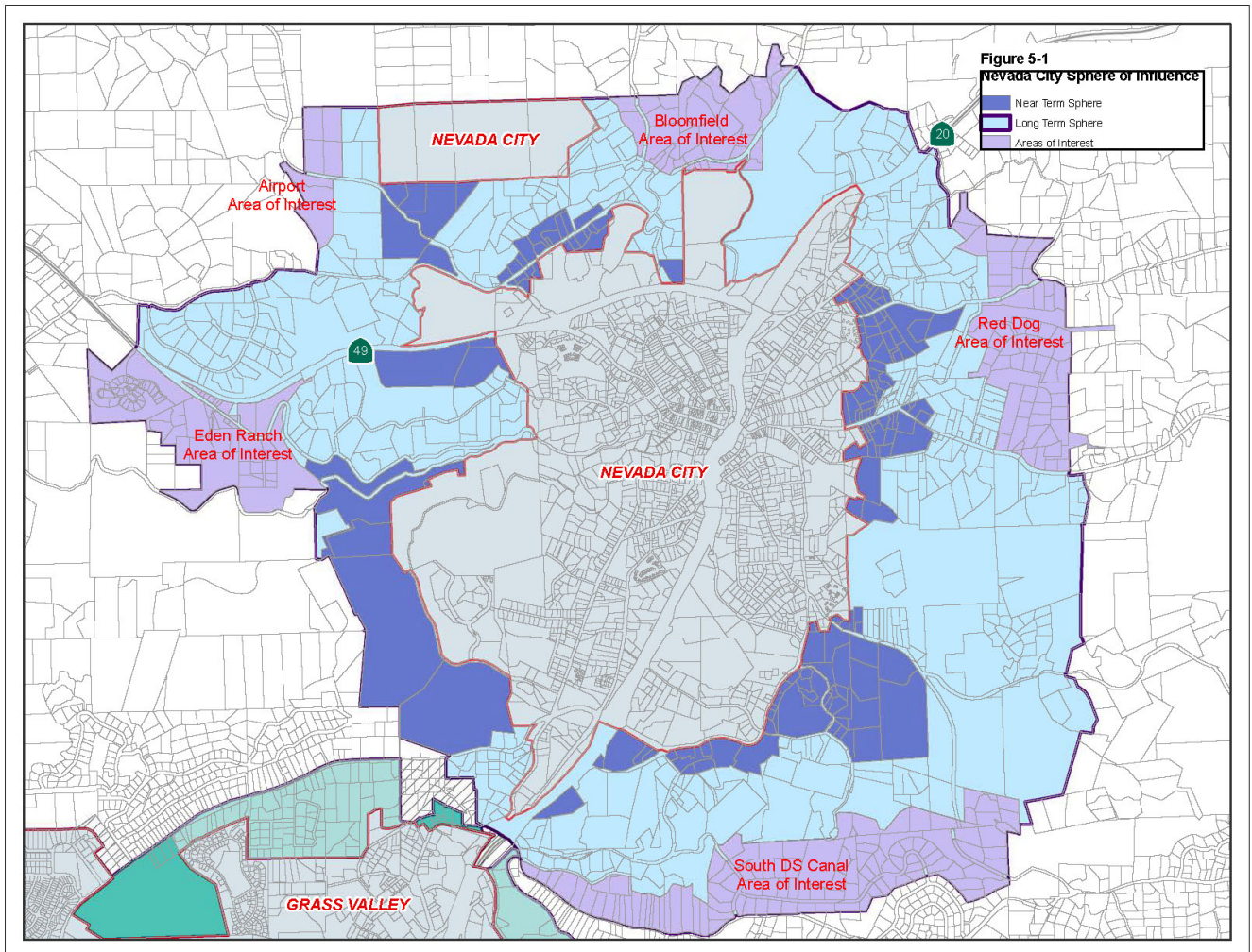


SECTION 4.00 – SITE INVENTORY AND ANALYSIS AND ZONING

FIGURE 4.00-2. RESIDENTIAL ZONES MAP (R1, RR, R2 AND R3)







Please refer to the following documents for further information. This includes a more detailed description of the potential of the study area (City boundary and Sphere of Influence) for provision of more housing units, including how many units and what type of units could be supported with improved infrastructure:

- 2019 Housing Element Update:  
<https://nevadacityca.municipalonline.com/files/documents/FinalHousingElement-adoptedandcertified1324071118052220PM.pdf>
- Nevada City Sphere of Influence Update – 2020  
<https://www.nevadacountyca.gov/3038/Nevada-City-Sphere-Update>
- 1986 General Plan (this includes SOI)  
<https://nevadacityca.gov/files/documents/GeneralPlan1313015909011116PM.pdf>

### Impact of this Funding and Study

The impact of this funding and Study would be to provide capacity information to the City and property owners in the SOI and identification of areas where facilities need to be upsized or upgraded to accommodate an increase of potential for development of housing units. Upon completion of the study, property owners will be provided the synopsis of the study with links to study documents for reference. The City would also look for grants for infrastructure improvements identified with the study and incorporate these projects into the Capital Improvement Plan. This is intended to encourage the development of new housing units but is largely dependent on decisions by private property owners. Actual plans for mainline extensions or infrastructure improvements would be prioritized as development plans and entitlements are proposed or approved.

In the City's 2022 annual strategic plan, development of workforce and affordable housing was identified as a high priority for the City. The proposed infrastructure planning study with funding for hydraulic modelling will significantly help achieve these goals and objectives.

### Analysis of Water Infrastructure

The City supplies treated water to 1,350 connections, approximately 70 percent of the water connections within the City's boundaries with the remainder being served by NID. To serve its residents, Nevada City operates a network of approximately twenty-one (21) miles of water distribution pipelines. The City also operates and maintains a water treatment plant and three above ground storage tanks with a peak capacity of 2.0 million gallon per day (MGD) and a maximum daily demand of 1.54 MGD. Current use is a maximum of 0.74 MGD which is 48% of treatment capacity.

It should be noted that distribution systems currently have pipelines that were installed as early as the 1850s. Approximately 1/3 of all pipelines in excess of 100 years in age. The city's water distribution age classification maps ("age class maps") available at the City's engineering department provide visual depiction of the age of the pipelines currently in use. The City regularly replaces these pipelines, so having a hydraulic model will be helpful in determining appropriate pipe sizes that can be installed to accommodate future growth.

Properties in the City of Nevada City's jurisdictional boundary for treated water service receive water service from the City and will continue to receive service at time of development or redevelopment. The hydraulic model will be used to demonstrate capacities and needs of the water distribution system to serve additional housing units within this jurisdictional boundary which is within City limits.

Properties in the SOI, and other portions within City limits, rely upon the Nevada Irrigation District (NID) for treated water service or have their own private wells. Service agreements exist between NID and the City which allows service to be provided by one or the other depending on proximity and eligibility of existing infrastructure. In addition, NID also sells raw water to the City to augment the City's water supply. As areas are

annexed in the SOI, if public water service is desired and if it can be feasibly provided, in almost all cases it will be provided by NID. NID would plan for the financing and extension of infrastructure to serve these areas.

### Analysis of Wastewater Infrastructure

The City wastewater service area includes all lands within its boundaries. The City serves 1,380 sewer connections, two thirds of which are associated with residential use and the remaining one third serving commercial / institutional uses. The City's wastewater treatment plant (WWTP) was comprehensively upgraded and expanded in 2006 and has a permitted average dry weather capacity of 0.69 MGD. Current average dry weather flow ranges from 0.38 to 0.47 MGD, approximately 68 percent of capacity. The WWTP is operated in compliance with Central Valley Regional Water Quality Control Board Discharge Permit.

Nevada City operates a network of approximately twenty-seven (27) miles of sewer collection pipelines. The City also operates and maintains a wastewater treatment plant that is permitted for an average dry weather flow of 0.69 MGD. Similar to the water distribution system, the wastewater collection system currently has pipelines that were installed as early as the 1850s. Approximately 1/3 of all pipelines in excess of 100 years in age. The city's sewer collection system age classification maps ("age class maps") provide visual depiction of the age of the pipelines currently in use. Replacement of these pipelines are included in the City's Capital Improvement Plan.

Most properties in the SOI Plan update area are not connected to any public sewer system. With the exception of Eden Ranch, the County does not provide wastewater collection and treatment to properties within the unincorporated SOI Plan update area. Most of the county land in the SOI area uses on-site sewage disposal/septic systems. Due to the predominant use of septic systems, there is low-density housing on many of the parcels in the SOI. Annexation could indirectly induce extension of sewer services to these areas which would allow for more development in accordance with the City's SOI Plan and General Plan land use designations.

### Project Benefit

The benefit of our approach to preparing the Infrastructure Planning Study is that upon completion the City would have a hydraulic model with capacity information and be able to identify improvements needed for specific areas that have the largest potential for additional housing units.

Nevada City could reasonably accommodate more growth within the next decade given the current demand for housing. By gaining an understanding of our infrastructure needs, we can encourage housing development both outside city limits and infill development. Presently, there is particular demand for Infill housing due to State legislation that encourages Accessory Dwelling Units (ADUs), well as secondary housing units and urban lot splits promoted though Senate Bill 9. The City is uniquely

situated to provide housing that is within walkable proximity to commercial, social, entertainment and public recreation hubs and a nationally registered historic district.

#### Collaboration with various stakeholders

Collaboration with the County of Nevada, NID and LAFCO would be necessary for any development being proposed in the Sphere of Influence. Much of the initial collaboration was done during the Sphere of Influence update that was completed in 2020. However, as specific projects or proposed developments are proposed, these agencies will be involved during planning approvals and entitlements.

The final draft of the Infrastructure Planning Study will be routed to each of the above referenced agencies for comment. The final approved document will be presented at a public meeting (City Planning Commission and/or City Council Meeting) and made available on the City's website and at City Hall. There will be opportunity for public review and comment (both written and oral comments) prior to and during the public meeting(s).

Afterwards the study will be available to other agencies, public, property owners and developers for reference as housing projects are being considered for implementation. The City would also look for grants for priority infrastructure improvements identified with the study and incorporate these projects into the Capital Improvement Plan.

#### Work Schedule

The City intends to meet the schedule outlined in the Request for Proposal. All required tasks including preparation of the hydraulic modelling and the final report would be completed within the desired timeline, assuming allocation of funds in November 2022 and final expenditure and delivery of Study(s) by July 31, 2023. City staff who would be assigned to this would include City Engineer, City Planner and City Manager.

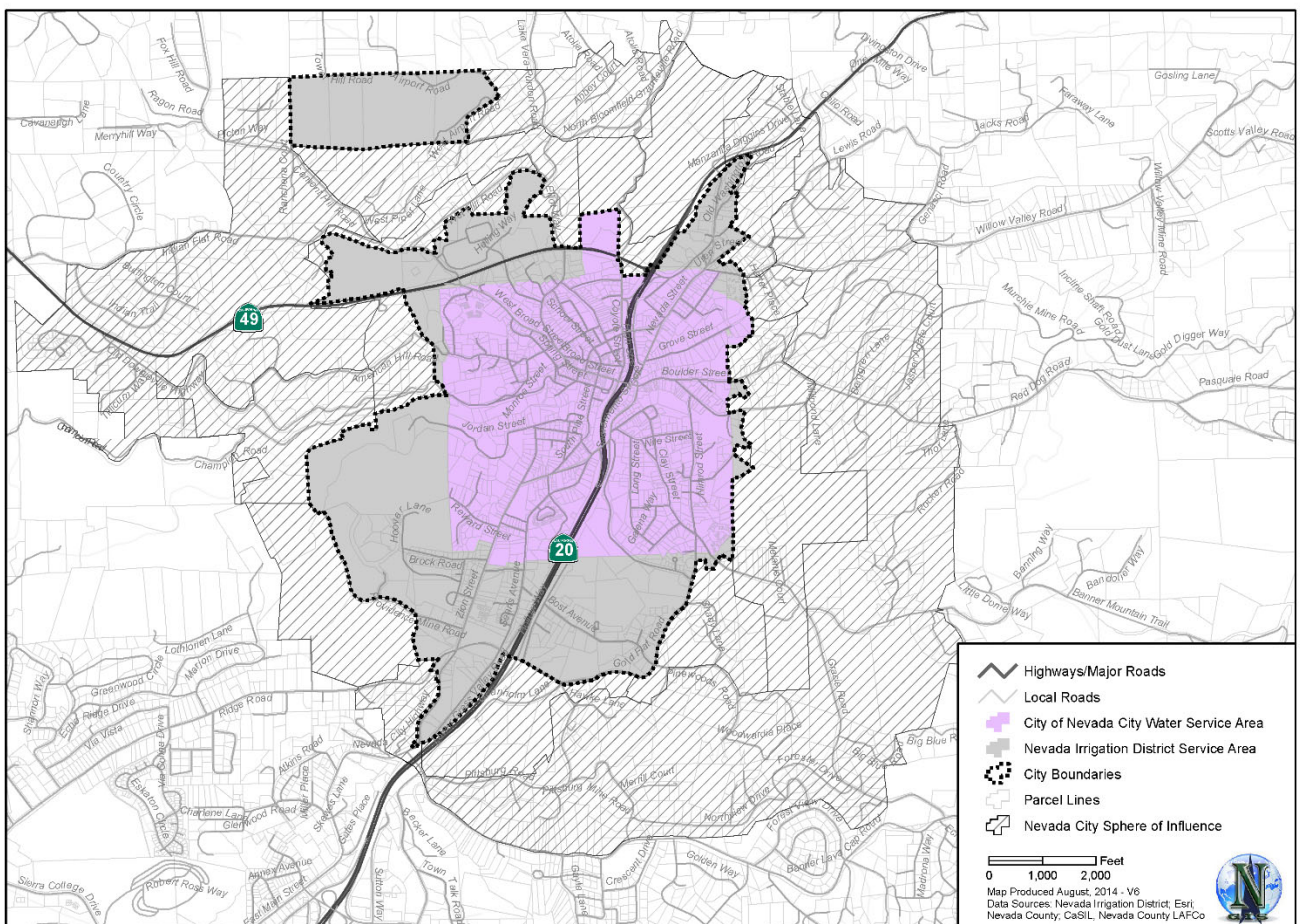
As mentioned, a consultant will prepare the hydraulic study. Upon notification of the County's intent to award the proposal to the City, the City will issue an RFP for hydraulic modeling and consultant will be selected. We anticipate that a consultant could initiate work by late January 2023 and complete the modeling by the end of March 2023. The City would prepare and issue the draft study by May 2023 and the finalized study would be complete by July 2023.

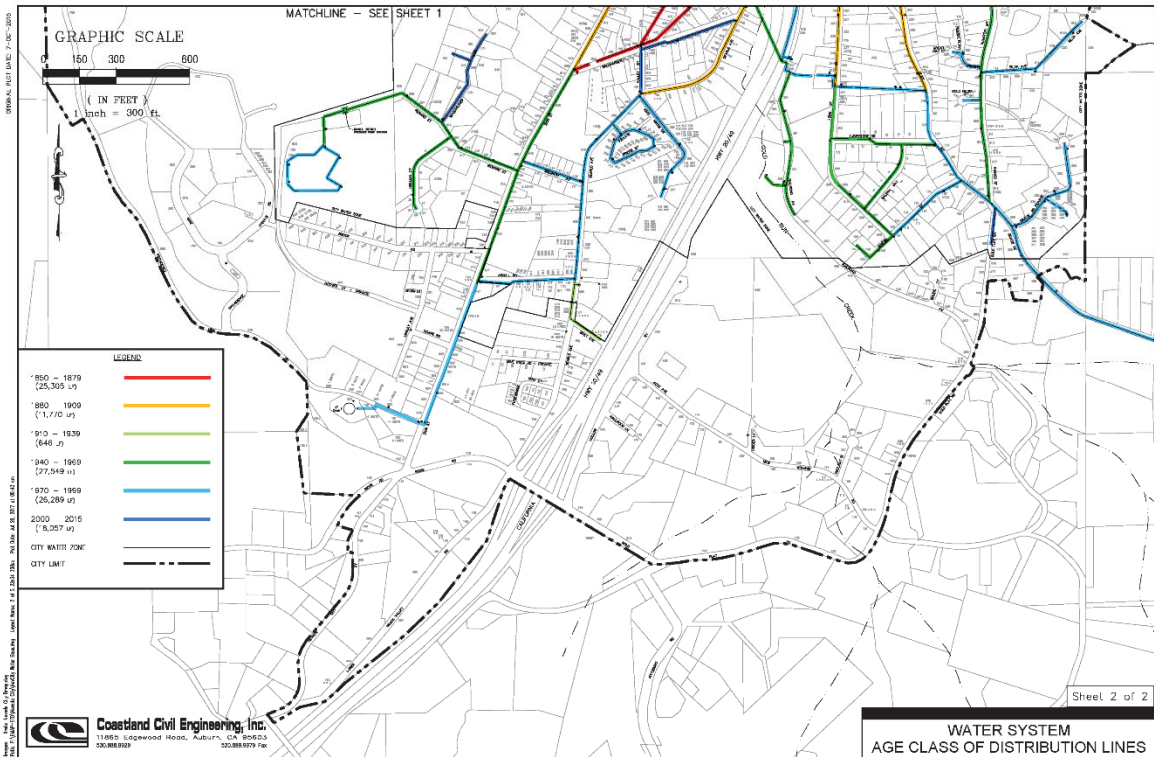
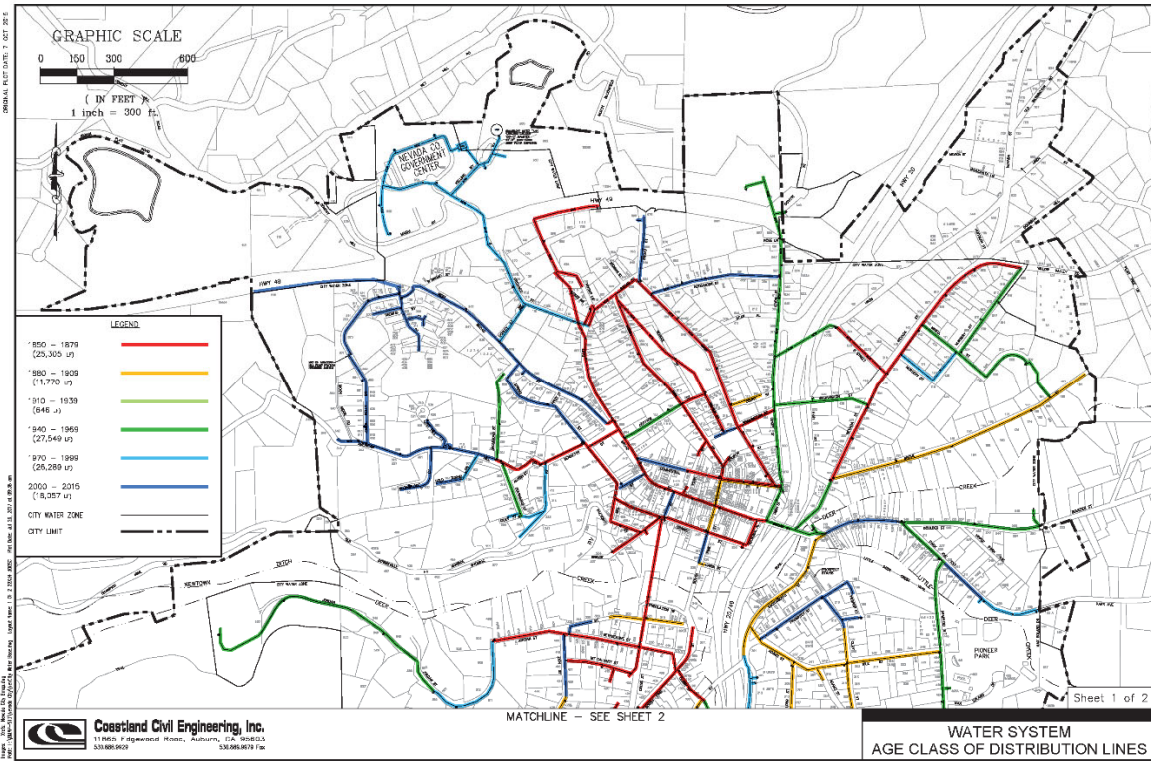
## Exhibits for Water and Sewer

Exhibits showing water and sewer infrastructure are included herein for reference. The age-class maps show the oldest pipes (<100 years old) which will likely be replaced within the next 20 years. As the City replaces these pipes, there is opportunity for infrastructure upgrades as needed to support new housing within city limits and the sphere area.

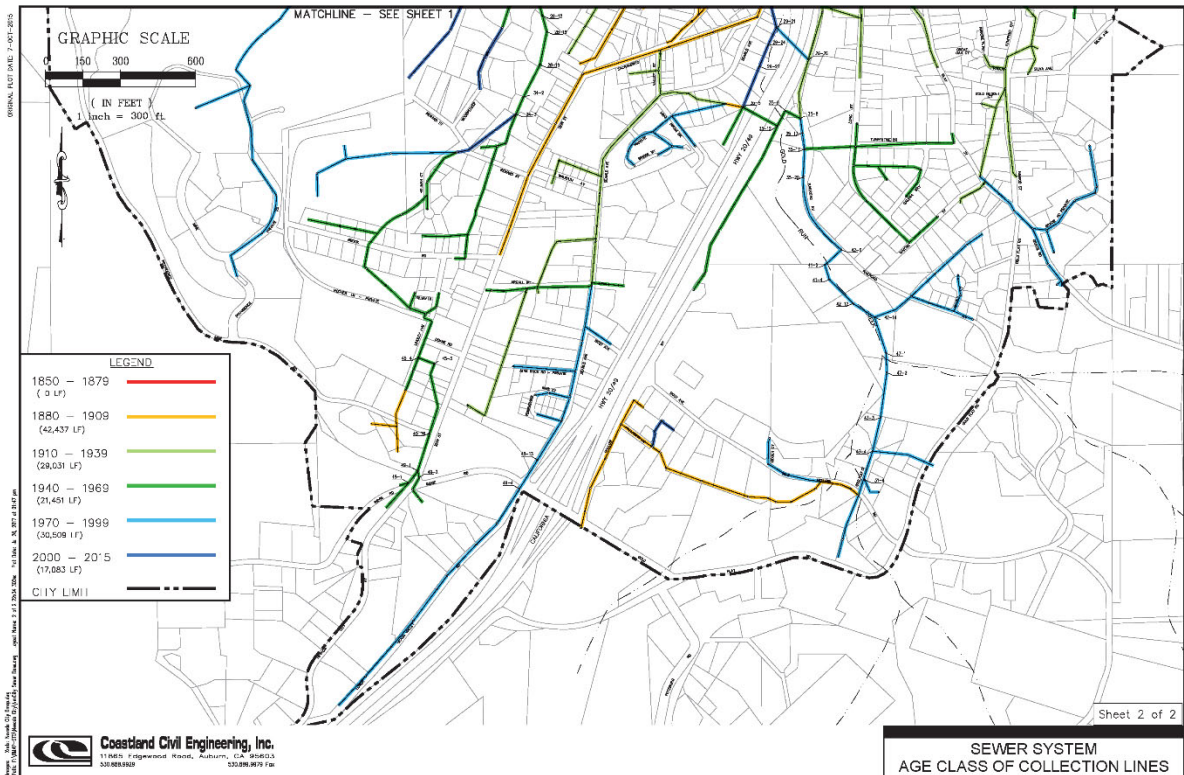
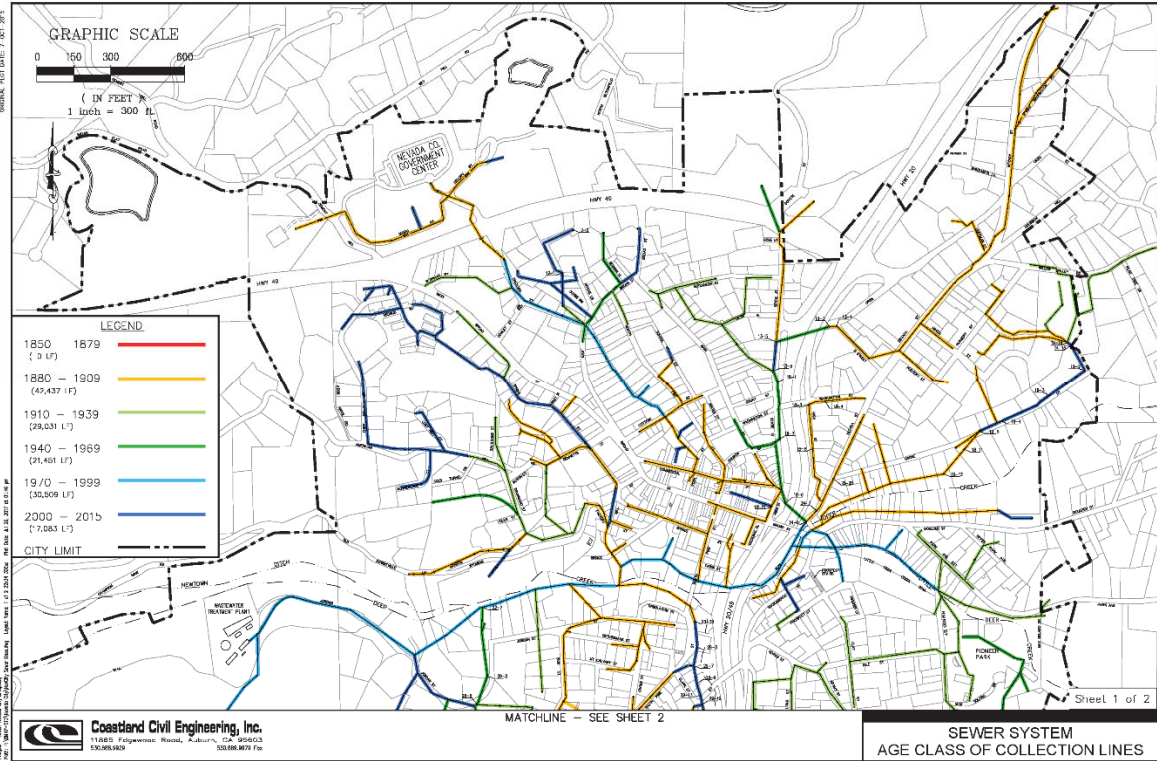
The City's current Capital Improvement Plan and Infrastructure and Operations Audit (2017) are available for reference at City Hall. These documents provide additional information such as an evaluation of the existing system, prioritized projects and engineering cost estimates for planning improvements. This proposal for an Infrastructure Planning Study and Hydraulic Modelling will support any potential upgrades to infrastructure required to support new housing within the city and sphere area.

### Exhibit 4-2: Water Service Providers in Nevada City





City of Nevada City proposal for Regional Infrastructure Planning Study



## **TAB C: Collaboration and Community Impacts**

The City will initiate the study by meeting with County of Nevada Planning Department for a project kick-off. The City will explain the approach to the preparation of the hydraulic modeling and discuss the expected outcomes of the study. This will include a discussion of the project plan and objectives, project timeline and implementation approach / strategy. The City will make any adjustments to the scope of work in collaboration with the County staff.

Given that the study will be based on current zoning designations with no immediate development projects, we do not anticipate collaboration with the general public, citizen groups, housing developers, or adjacent property owners during preparation of the Study. We will engage with these stakeholders after the report is complete by providing the study in a Draft and Final format at public meetings (Planning Commission and/or City Council) and making the report available for review on the City's website and at City Hall. The public will be given an opportunity to comment on the report at the public meeting(s).

## **TAB D: Reporting Requirements**

During preparation of the study, the City will provide reporting as follows:

- a) On a bi-weekly basis, check-in with County staff to discuss findings, challenges and to verbally report progress.
- b) Monthly – submit summary report to Planning Director
- c) Ongoing – email virtual meetings, and phone discussions with County project lead as necessary.

## **TAB E: Leveraging Partnerships and Resources**

The City will partner with appropriate agencies including County of Nevada, Nevada Irrigation District, Nevada County Transportation Commission and LAFCO on any development projects. A recent example of this is the Cashin's Field project which was completed this year which involved multiple agencies. Another recent example of collaboration with County of Nevada and LAFCO is the County property that is planned for the Tahoe National Forest Headquarters with an Annexation into City limits.

The City will provide matched funding for the study by preparing the study in-house with City staff time (Planning, Engineering and Public Works) and will only use allocated funds to pay for consultant costs for hydraulic modelling. If the consultant costs exceed the awarded amount, the City will pay the difference in cost using city funds that are allocated for water and sewer engineering services.



## **TAB F: Required Statements**

- A. The City of Nevada City will perform the services and adhere to the requirements described in this RFP, including any addenda (addenda 1, Nov. 18 2022).
- B. Subsequent to award of this RFP, all or part of any submittal may be released to any person or firm who may request it, as prescribed by the State of California Public Records Act (PRA).
- C. The City will not substitute members of the designated team without approval by Nevada County staff (per Section 4.6 of RFP)
- D. The City confirms that there is no Conflict of Interest (per Section 4.5 of the RFP)
- E. The City attests that there has been no Collusion (per Section 4.7 of the RFP)
- F. The City agrees to fulfill the indemnification and insurance requirements contained in the draft contract (Section 4.8 of the RFP).
- G. The City is not currently subject to debarment under Title 49, Code of Federal Regulations, Part 29.

## **TAB G: Exceptions**

The City does not request any exceptions, alterations or amendments to the Scope of Work or other requirements of this RFP, including the Draft Contract.

## **TAB H: Proposed Budget**

See attached Budget Proposal Form

**Budget Proposal Form**

**INSTRUCTIONS:** Using this form, define the following.

- A. What is your total funding request for this grant? (Applicants should request a grant amount that reflects what is necessary to accomplish project goals. The County reserves the right to recommend an amount more or less than the total requested.)
  
- B. Summarizing major expenses and other sources of revenue including matching funds. Be sure to list sources and amounts of matching funds in your budget. (Note: Matching funds are not required but are strongly encouraged, and demonstration of leveraged resources and matching funds will affect score.)

**All cost proposals shall be signed and dated per Section 5.2 of this RFP and shall be submitted in a separate sealed envelope or package.**

DESCRIPTION	COST
City Staff Time to prepare Study (160 hrs @ \$100/hr)	\$ NIC
Consultant Cost to prepare Hydraulic Modeling	60,000
City Staff Time for Meeting with County and Public Meeting	NIC
Contingencies (estimate 10%)	NIC
Note: Items shown as NIC will be Matching Funds by City	
<b>TOTAL COST:</b>	<b>\$ 60,000</b>

Name of Firm: CITY OF NEVADA CITY

Authorized Signature: 

Printed Name and Title: SEAN GRAYSON, CITY MANAGER

Date: 11/17/2022