CITY OF BISHOP

377 West Line Street - Bishop, California 93514
Post Office Box 1236 - Bishop, California 93515
760-873-8458 publicworks@ca-bishop.us
www.ca-bishop.us/CityofBishopPublicWorks.html

Request For Proposals

Consultant Services for Water Storage Tank Project

Release: 9 November 2010

Close: 10 December 2010

Contact: David Grah, Director of Public Works

General: The City of Bishop requests consultant proposals for project delivery services on a project to construct a new water storage tank and make related changes to existing system and controls.

Purpose: The purpose of the project is to provide additional water storage, to increase reliability and efficiency, and to maintain positive pressure in the entire water transmission and distribution system.

The purpose of this Request for Proposals is to procure a consultant to develop the project to the point of construction and to provide consultant support during construction.

Existing System and Other Information: A map and a schematic of the City of Bishop municipal water system are attached.

The city's municipal water system serves a permanent population of about 3,500 through about 1,100 service accounts. Its source is groundwater from two production wells, Well 2 and Well 4. A third well, Well 1, can be used only as a standby well due to high fluoride levels. Well 4 is the main water source and can produce about 1,650 gallons per minute. Well 2 runs when needed to maintain desired system pressure and can produce about 1,800 gallons per minute. Well 1 can produce about 1,100 gallons per minute. Water from Well 4 is subject to mild chlorination. Water from other wells is not chlorinated.

There is one welded steel storage tank with a capacity of 1 million gallons. Overall system pressure is provided by the elevation difference between the

existing tank and the customer area. Well 4 fills the existing tank and is controlled based on tank level. Wells 1 and 2 have variable speed drives, pump directly into the system, and are controlled by system pressure.

Water consumption ranges from about 700,000 gallons per day average during the winter to about 3,000,000 gallons per day maximum during the summer.

There is a 12 inch pipe about 2 miles long between the existing tank and the customer area in town. During high demand, the head loss in this long pipe requires that Well 2 operate to maintain adequate pressure in town. In addition to being needed to maintain system pressure, on highest demand days Well 2 is needed to meet the total demand.

The City of Bishop Water Master Plan (available at http://www.ca-bishop.us/Misc/WaterMasterPlan2008.pdf, page 30) suggests the city increase its total water storage capacity from 1 million gallons to between 1.85 and 2.48 million gallons.

The existing tank is about 55 feet lower than Well 4 and about ½ mile closer to the customer area than the well. As a result, the 12 inch (portions 14 inch) water line between the tank and the well empties when the well stops running. This lack of positive pressure in this pipe is a potential contamination concern.

The city has developed an initial concept for the project. The concept is outlined on the attached Water System Elevation Schematic and rough control logic sketches. This initial concept should be one of the concepts the consultant develops and evaluates for the project.

A Supervisory Control and Data Acquisition system is currently being implemented at the Well 2, Well 4, existing storage tank, and Public Works Shop. Project changes or additions should be compatible with this system.

If the new tank is located at the Well 4 site, aesthetic considerations should be anticipated.

In the 5 to 10 years following this project, the city plans to expand its system by adding an additional well at the Well 4 site. See attached Well 4 site map.

Scope of Project: The general scope of the project is to add a single approximately 1 million gallon tank, probably at the Well 4 site. An alternate

location is the existing tank site where there is room for two additional 1 million gallon tanks. The project needs to address the potential contamination concern with the water line between Well 4 and the existing tank. Whatever the final project solution, it needs to contribute toward maximizing system efficiency and reliability.

Scope of Consultant Services: Proposals should cover the full range of project delivery activities necessary to complete this project. Consultant activities range from project scoping, through preliminary design, environmental analysis, preparation of plans, specifications, and estimates, bidding, to construction engineering. Contribution to the development of the project by city staff will be limited to review of consultant work products.

Important early activities include verifying or refining size of new tank, determining site for new tank, determining the tank material and type of tank, and estimating the construction cost. Construction costs should be periodically updated throughout life of consultant work on the project.

Because the scope and cost of consultant services for later activities may depend on the results of consultant work in earlier activities, consultant work may be contracted in phases with later phases being added by amendment to the original contract.

Proposal: A qualifying proposal must address the entire scope of consultant services and include:

1. Brief description of firm, contact person, address, telephone number, and e-mail address.
2. Resumes of staff involved.
3. Description of approach to work and description of proposed delivery products.
4. Examples of reservoir projects of similar scope.
5. Three references at small agencies where firm has implemented similar projects.
6. Proposed work schedule.
7. Proposed basis of consultant compensation (such as cost plus or lump sum).
8. Estimated consultant cost and assumptions used to develop estimate.

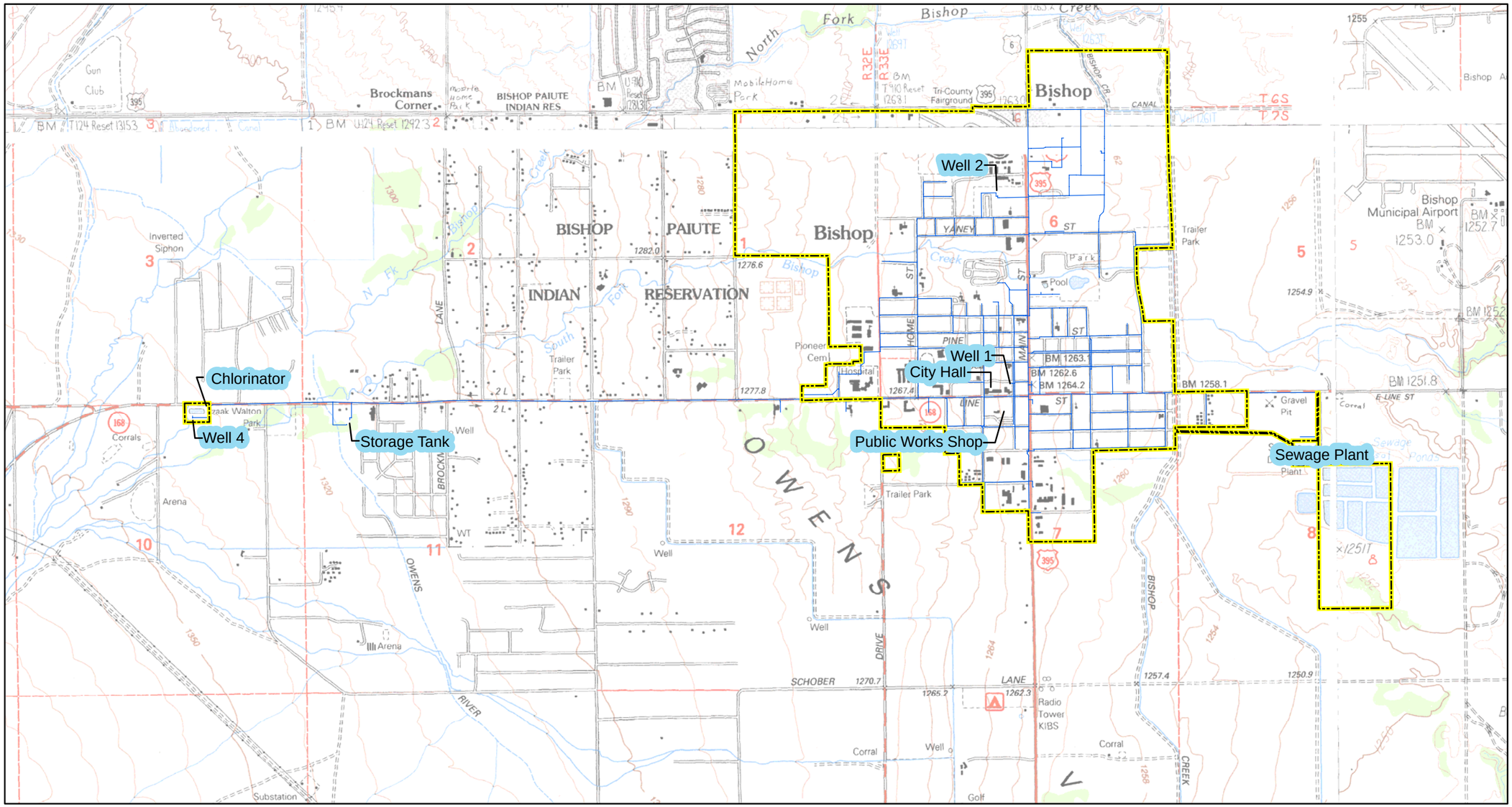
Proposals must be received no later than 1500 (3 pm) on the closing date of this Request for Proposals (RFP). Send proposals to:

David Grah
Director of Public Works
City of Bishop
377 West Line Street
Bishop, California 93514
publicworks@ca-bishop.us

Three paper copies and one electronic copy of the proposal clearly marked with the title of the RFP shall be submitted.

Selection Process: The consultant will be selected based on the experience and ability of the firm and staff to accomplish the scope of work, based on the proposal and considering the effective use of funds. Each firm will be rated based on the requirements of this RFP.

The City will attempt to negotiate contracts with the highest rated firm. The City reserves the right to reject any or all proposals, to waive minor irregularities in said proposals, or to negotiate minor deviations with the successful firm.



Legend

- City Limit
- Water Line

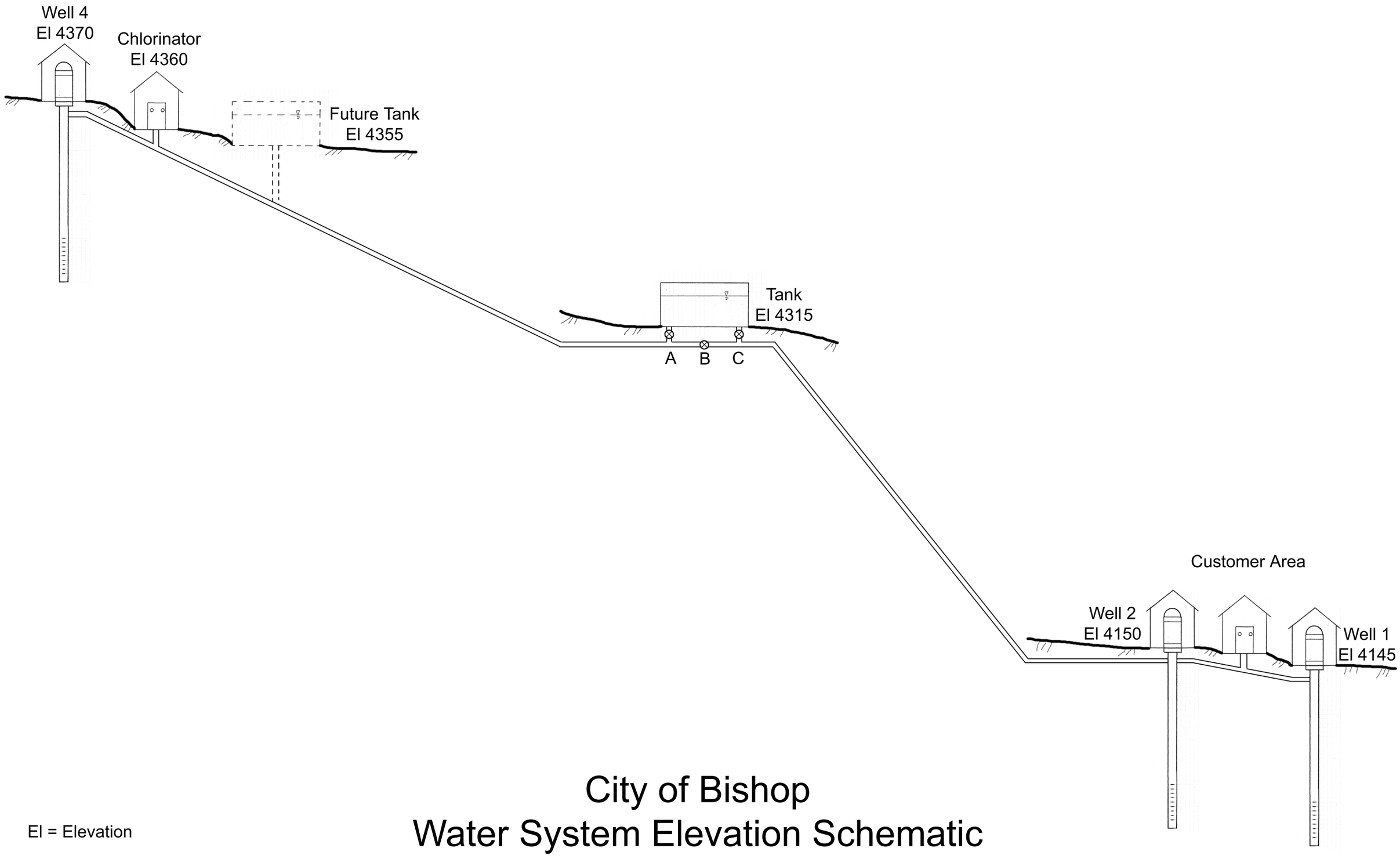
1 inch = 2,000 feet

0 — 1 Miles

City of Bishop

Water System Overview

City of Bishop Location Map



El = Elevation

City of Bishop
Water System Elevation Schematic

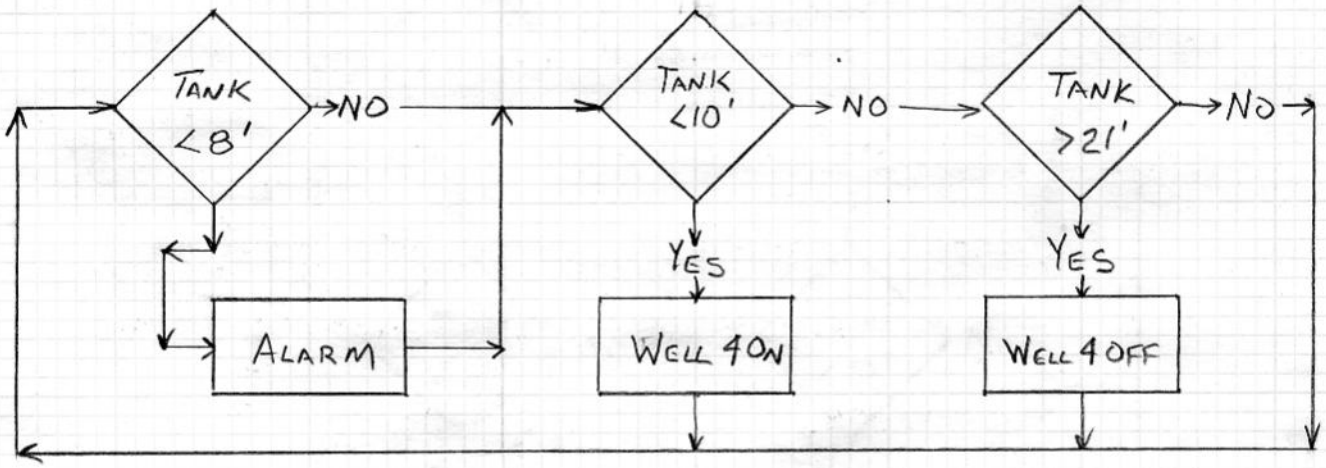
City of Bishop Well 4

CURRENT OPERATION:

VALVES A, B, AND C MANUAL AND LOCATED ON WEST LINE STREET

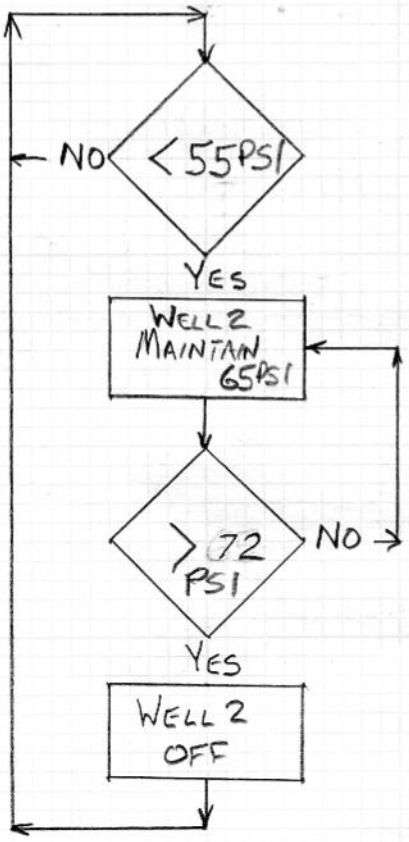
VALVES A AND C OPEN, VALVE B CLOSED

TANK / WELL 4



TANK / WELL 4

WELL 2 / SYSTEM



WELL 1 / SYSTEM

SAME AS WELL 2 BUT;

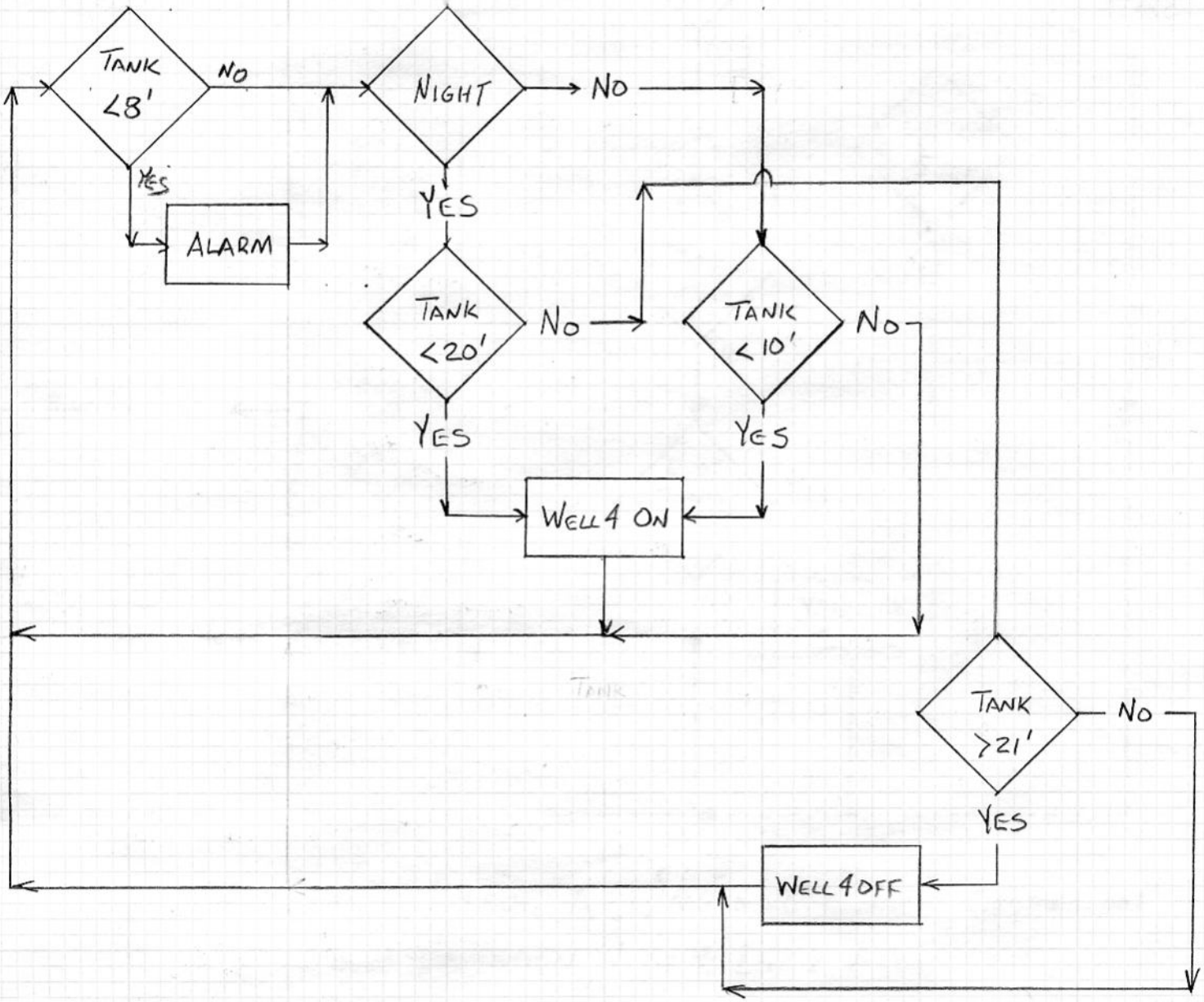
45 PSI

60 PSI

65 PSI

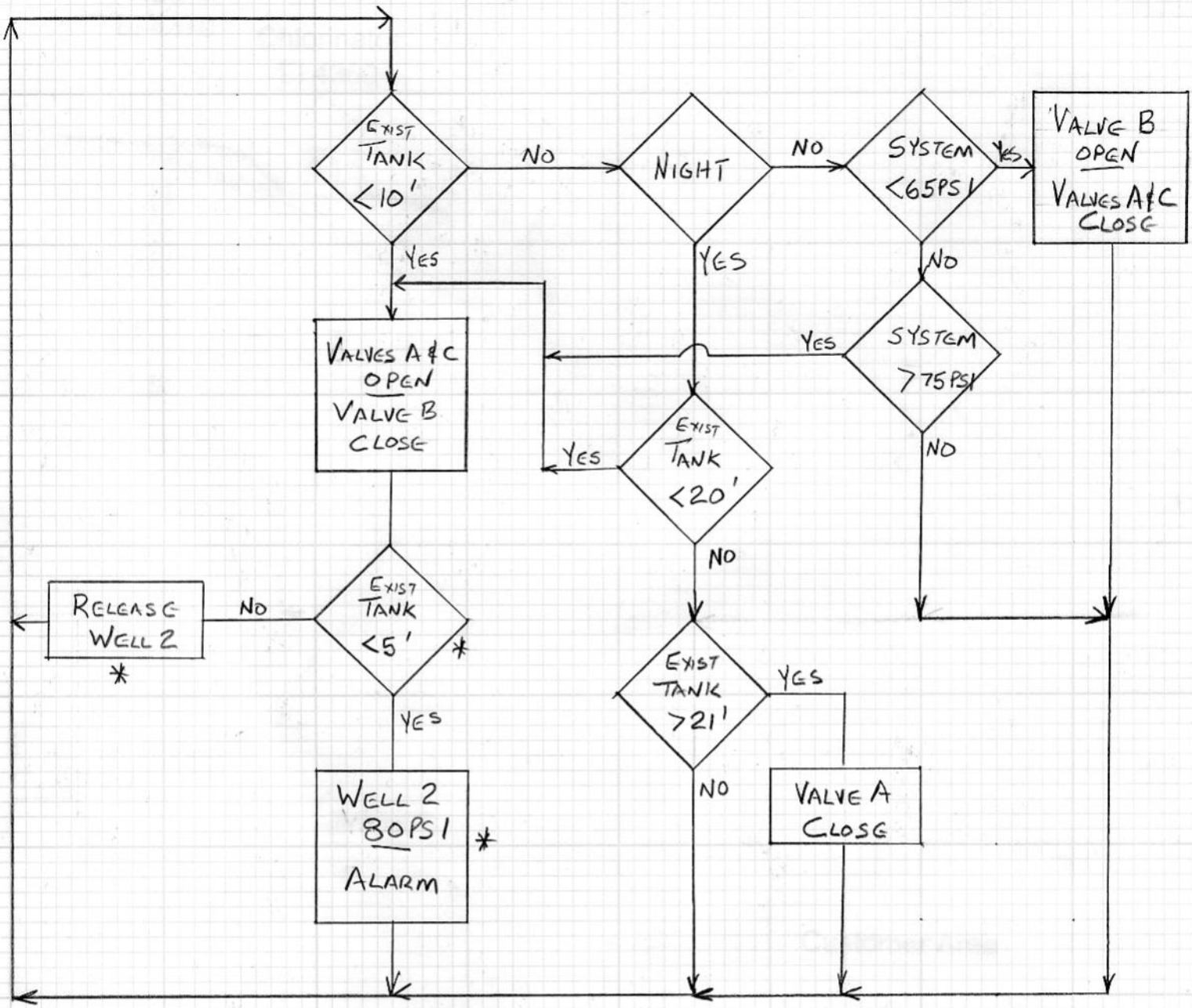
Improved Current Operation

Valves, Well 1, Well 2 Same As Current Operation



TURE OPERATION:

EXISTING TANK:



- WELL 4 AND FUTURE TANK AS IN "IMPROVED CURRENT OPERATION"
- WELL 2 AS CURRENT OPERATION WITH * LOGIC ADDED
- WELL 1 AS CURRENT OPERATION
- VALVES A, B & C AUTOMATED AND MOVED TO TANK SITE