

CITY COUNCIL STUDY SESSION

March 6, 2012

The City Council of the City of Norman, Cleveland County, State of Oklahoma, met in a study session at 5:30 p.m. in the Municipal Building Conference Room on the 6th day of March, 2012, and notice and agenda of the meeting were posted at the Municipal Building at 201 West Gray, and the Norman Public Library at 225 North Webster 48 hours prior to the beginning of the meeting.

PRESENT: Councilmembers Dillingham, Gallagher, Griffith, Kovach, Lockett, Spaulding, Mayor Pro Tem Quinn

ABSENT: Councilmember Ezzell, Mayor Rosenthal

Item 1, being:

DISCUSSION REGARDING THE SCOPE OF WORK FOR THE 2060 STRATEGIC WATER SUPPLY PLAN.

Mr. Ken Komiske, Director of Utilities, said on November 21, 2011, the Norman Utilities Authority (NUA) forwarded a Request for Proposal (RFP) 1112-35, to engineering consultants for the preparation of the Plan and the project will update the City's previous plan prepared in 2001. He said the Plan is budgeted in the FYE 2012 Capital Budget for \$300,000.

The goal of the Plan is to strengthen the City's knowledge of short and long term water supply source(s) and begin the implementation of a robust, economic water supply solution acceptable to the citizens of Norman. Mr. Komiske said the NUA is currently unable to supply sufficient potable water to meet peak demands and is concerned about losing groundwater resource due to a probable reduction of the MCL for chromium, arsenic, or other contaminants.

The current water supply for Norman is surface water (70%), Garber-Wellington (27%), and Oklahoma City (OKC) (3%). Mr. Komiske said the water supply received from OKC is during the summer time when water levels were low which has occurred over the last 10 to 11 years. The water demand findings for Norman are as follows:

- Current yield of Lake Thunderbird may be reduced
- Quality of Lake Thunderbird is uncertain
- Garber-Wellington aquifer yield may be reduced by half or more
- Staff projection for population equivalents in 2060 is over 200,000
- Based on expected demand, there may be a short fall of 24 MDG in 2060

Mr. Komiske said there are previous studies to draw information from for the Norman 2060 Strategic Water Supply Plan to include:

- Norman 2020 Land Use and Transportation Plan, prepared by the Burnham Group, dated February 1997;
- Norman 2025 Land Use and Transportation Plan, as amended;
- 2040 Strategic Water Supply Plan, prepared by CDM/CH2M Hill, dated February 2001;
- Arsenic Study, prepared by CH2M Hill, dated June 2002;
- Water Treatment Plan Expansion Evaluation, prepared by Carollo Engineers, dated May 2007

Mr. Komiske said the Plan will need to also consider the findings of the May 2011, update of the Oklahoma Comprehensive Water Plan (OCWP), the Regional Raw Water Supply Study for Central Oklahoma, the Proposed Scissortail Reservoir Feasibility Study, the possible effects of the pending Garber-Wellington Water Management Study, the pending Environmental Protection Agency (EPA) Toxicological Review of Hexavalent Chromium, and the water reuse regulations to be promulgated by the Oklahoma Department of Environmental Quality (ODEQ). He said although the state water plan(s) are larger, they only looked at one particular avenue for water needs and Norman will look at all available possibilities, alternatives, and options. Mr. Komiske said the Plan will also need to coordinate with and consider the findings of the ongoing Central Oklahoma Master Conservancy District (COMCD) Lake Thunderbird Reuse Study.

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Mr. Komiske said for the 2008 Regional Water Supply Infrastructure Study that Norman joined with 11 other cities to look at getting water for Central Oklahoma. He said information for each city was gathered and presented to CDM, who performed the Study and CDM reviewed the quantity and quality for each city. Mr. Komiske said CDM determined an \$850,000 plan site specific to southeast Oklahoma, i.e., Kiamichi River, Lake Sardis, Lake Hugo, and/or McGee Creek, could be utilized to fill the water demand. He said the plan would take the water from a southeast Oklahoma water supply and pipe it to central Oklahoma, whether it would be treated or raw water, and how to divide the costs associated between all the cities.

Norman has had several water plans; a 1992 Master Water Plan and a 2001 Strategic Water Supply Plan. Mr. Komiske said it has been 11 years since the last Water Supply Plan and it seems appropriate to update and/or look at where Norman will obtain water. Mr. Komiske said Norman will look at baseline development to determine how much water Norman will need; existing system assessment to determine how much water Norman currently has and the population plan growth; alternatives evaluation, and plan development.

Mr. Komiske said the 2001 Strategic Water Supply Plan recommended expanding the Garber-Wellington Aquifer Wellfield, which Norman has done by drilling additional wells, and partnering for Southeast Oklahoma Water Sources, which Norman proposed in the last water rate increase, i.e., put aside funds to buy water rights whether in southeast Oklahoma or elsewhere. He said changes since 2001 Plan include the arsenic rule in 2006 whereas Norman lost half of our water well supply; Chromium VI issues of whether or not the maximum contaminant levels (MCL) will be required to be lower; additional ground water regulations may change; the aquifer yield may be considerably lowered from two feet per acre foot to six inches per acre foot; according to the Bureau of Reclamation (BOR), Lake Thunderbird Safe Yield changed from 21,600 acre feet per year because it assumed Norman was using all their wells to actually 15,600 acres feet per year; re-use regulations will possibly be considered and adopted; conservation is addressed in the State Water Plan and how to best use water in the future should be incorporated state wide; and technological improvements will allow better and improved method to treat water.

Councilmember Spaulding asked Staff to define Lake Thunderbird Safe Yield and Mr. Komiske said the BOR developed Lake Thunderbird and the United States Army Corp of Engineers built the lake. Mr. Komiske said the *safe yield* for any man-made lake is the amount of water the community can obtain in the worst drought of record for that particular community, therefore, assuming that Oklahoma goes through the worst drought on record, the amount that Lake Thunderbird could still produce is determined – in order to ascertain the water supply for the three (3) cities of Norman, Del City, and Midwest City. He said when Lake Thunderbird was constructed the assumption was it was a 21,600 acre feet per year of safe yield, but the BOR re-looked at the calculations stating they always assumed the three (3) cities still had and used water wells to draw on and therefore the safe yield is only 15,600 acre feet per year. Councilmember Gallagher asked how many wells can the City drill and Mr. Komiske said

Mr. John Rehring, Carollo Engineers, Inc., additional input for Council to consider concerning the Norman 2060 Strategic Water Supply Plan are as follows:

- Population and water use projections for Norman
- Quality and sustainable yield of the Garber-Welling Aquifer
- Water rights versus sustainable yield
- Continued availability of current water supplies
- Availability of future water supplies within Basin 62
- Reallocation of under utilized rights to Lake Thunderbird
- Increased effluent reuse through irrigation
- Indirect potable reuse
- Effects of conservation
- Long term needs

Proposals were received from seven (7) firms on December 20, 2011, and a proposal review committee consisting of three (3) Staff members and two (2) citizens reviewed and rated the proposals. After much discussion, the proposal

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committee selected Carollo Engineers, Inc., of Broomfield, Colorado (Carollo) teamed with TetraTech of Oklahoma City to prepare the Plan.

The proposed work scope and tasks have been divided into two (2) phases. Staff has negotiated the work scope and cost with Carollo and recommends approval of Contract No. K-1112-114, Phase 1.

Phase 1:

Generally includes development and screening of supply options; defining water demand and opportunities for conservation/reuse; preserving existing water supply sources; enhancing local supplies; considering outside water sources; and screening potential sources and selecting the most viable sources. Phase I will include two (2) public meetings and one (1) Council presentation. The negotiated lump sum for Phase I is \$280,000. The estimated cost of specific tasks is identified in the scope of work and billings will be based on these costs.

Phase 2:

If approved by the NUA, includes compilation of approximately four (4) water supply portfolios that meet the projected water demand, and evaluate each portfolio based on a weighted criteria matrix developed by the NUA. The portfolios will be refined through modeling to optimize the water supply sources for implementation. Several public presentations and/or public education workshops may be scheduled pursuant to the desires of the NUA. The Phase 2 lump sum cost will be negotiated at a later date.

Items submitted for the record

1. Text File No. K-1112-114 dated February 3, 2012
2. Contract No. K-1112-114, with Task Order No. 1 and Attachment 1, Scope of Work
3. Final Fee Estimate – Norman 2060 Strategic Water Supply Plan – Phase 1, dated February 3, 2012

The meeting adjourned at 6:30 p.m.

ATTEST:

City Clerk

Mayor