## CITY COUNCIL CONFERENCE MINUTES

## January 10, 2017

The City Council of the City of Norman, Cleveland County, State of Oklahoma, met in a conference at 5:38 p.m. in the Municipal Building Conference Room on the 10th day of January, 2017, 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 Allison, Castleberry, Chappel, Clark, Heiple, Hickman, Holman, Karjala, Mayor Miller

ABSENT:

None

Item 1, being:

DISCUSSION REGARDING CHANGE ORDER NO. ONE TO THE NORMAN UTILITIES AUTHORITY CONTRACT WITH INDUSTRIAL HYDRO SERVICES, L.L.C., INCREASING THE CONTRACT AMOUNT BY \$11,484 TO UTILIZE THE FULL BUDGET AMOUNT FOR THE REMOVAL AND LAND APPLICATION OF LIQUID BIOSOLIDS AT THE WATER RECLAMATION FACILITY.

Mr. Ken Komiske, Director of Public Works, said the Water Reclamation Facility (WRF) is currently required by Federal and State law to remove and properly dispose of treated biosolids. He said frequent and regular removal of these solids from the treatment process is essential for maintaining treatment efficiency and the excess biosolids currently stored in the Storm Holding Facility are ready for removal.

Mr. Komiske said contract services are necessary to remove the back log of biosolids from the holding ponds thus leaving the Norman Utilities Authority (NUA) Staff time to remove normal daily production of biosolids. He said an advertisement for bids was mailed to vendors on September 30, 2016, and Staff received five (5) bids for the project. Industrial Hydro Services submitted the lowest bid of \$76,560 for removal of an estimated 4 million gallons of biosolids.

Mr. Komiske said since the bid unit price is favorable, Staff recommends approval of Change Order No. 1 increasing the volume of biosolids to be removed from 4 million gallons to 4.6 million gallons. He said this will allow Staff to better manage the remaining backlog of biosolids that has accumulated during construction of the WRF Phase II Improvements. Mr. Komiske said Change Order No. 1 increases the contract amount by \$11,484 (15%) to a revised total of \$88,044. He said the increase should be sufficient to remove the remaining biosolids in the northeast and northwest holding ponds as well as any remaining biosolids in the south pond.

Mr. Komiske said Staff recommends approval of the Change Order.

Mayor Miller said this item will be on tonight's agenda for Council consideration.

Items submitted for the record

- 1. Text File K-1617-77, Change Order No. 1, dated November 21, 2016, by Steve Hardeman, Utilities Manager, Water Reclamation Facility
- 2. Change Order No. 1 to Contract K-1617-77

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Item 2, being:

## DISCUSSION REGARDING THE DEVELOPMENT OF A DAM SAFETY POLICY.

Mr. Shawn O'Leary, Director of Public Works, introduced Carrie Evenson, Stormwater Engineer, to Council and he said the Public Works Department recently consolidated the Stormwater Division which is now under Ms. Evenson's direction.

Ms. Evenson highlighted a PowerPoint presentation regarding the dams in Norman and said the simple definition for dam is that it is a barrier that impounds water, which range from earthen dams on detention ponds to complex structures like Hoover Dam. She said the Oklahoma Water Resources Board (OWRB) is the regulatory authority and OWRB has minimum standards, maintenance, and inspection requirements on dams.

Ms. Evenson said the Oklahoma National Dam Inventory identified 24 dams in Norman, under the jurisdiction of OWRB, and the SWMP identified an additional 290 smaller dams also located in Norman. She said OWRB identified three (3) of the dams as "high hazard" dams that were in need of attention. The (3) three dams are the Hall Park Dam, Sutton Wilderness Dam, and the Summit Lakes Dam. Ms. Evenson said the City recently became the owner of the Hall Park Dam by virtue of an annexation process and was also identified as the responsible party for a high hazard dam in the Sutton Wilderness Park because the City had entered into a 50-year lease of that property from the State of Oklahoma Department of Mental Health. She said the third high hazard dam is located in the Summit Lakes Addition and is owned jointly by the Summit Lakes Homeowner's Association (HOA) and the Summit Lakes Villa HOA.

Councilmember Hickman asked whether the dam located in the Summit Lakes Addition was still considered a high hazard dam since Summit Lakes lowered the level of water in the lake that was ordered by OWRB and Ms. Evenson said yes. She said the HOA cooperated fully with OWRB and lowering the water in the lake will allow the HOA to determine what repairs need to be made on the dam. Mr. O'Leary said although the dam is less of a concern at this time, if a significant rain event occurred in Norman, the water would crest back up again. Councilmember Allison asked whether the hazard designation will go away once repairs/maintenance is completed, i.e., the City has done a lot of work on the Sutton Wilderness Dam, etc., and Mr. O'Leary said the hazard designation on the dams will likely never go away even once the repairs/maintenance are completed and it is possible that a low hazard dam can be reclassified to high hazard in the future.

Ms. Evenson said it is appropriate for the City to be involved in dams and dam safety because there is potential for loss of life and damage to property/infrastructure if a dam fails. She said one example is the Teton Dam Failure in 1976 in Madison County, Idaho, that resulted in 11 deaths and \$400 million in damages.

Ms. Evenson said the hazard-potential classification is based on potential impact of dam failure or unscheduled release on downstream areas. She said OWRB's three hazard-potential classifications include: <u>Low</u>: no probable loss of human life and low economic losses; <u>Significant</u>: no probable loss of human life but can cause economic loss or disruption of lifeline facilities; and <u>High</u>: probable loss of life. Ms. Evenson said OWRB does not give allowances or credits for evacuation or other emergency actions when assigning classification.

Ms. Evenson said high hazard dam requirements include annual inspections; an Emergency Action Plan (EAP); an Operation and Maintenance Plan; a \$350 annual administrative fee; routine inspections by dam owner; and routine maintenance. She said a registered Professional Engineer must conduct annual inspections on high hazard dams, provide an outline of the current status of the dam to include maintenance issues, etc., and submit a report to OWRB. She said the EAP will be updated annually with specific actions the dam owner will take to moderate problems at the dam; procedures for issuing early warning and notifying emergency officials; contain inundation maps; and will be submitted to OWRB.

Item 2, continued:

Ms. Evenson highlighted the Sutton Wilderness Lake Dam maintenance stating the 2011 annual inspection deficiencies included: the dam and spillway were in poor condition; trees and brush on the dam and within 50 feet of the spillway needed to be removed immediately; repairs to upstream and downstream slope of spillway was needed; and the constant outflow from conduit through the dam prevented an estimate of seepage. She said estimating seepage is important because it allows the dam inspector an idea of where the weak points are in the dam and/or how likely the dam is to breach.

Ms. Evenson said a construction contract was approved by Council on March 22, 2016, and repairs were completed in October, 2016, to include the following: installation of principle and auxiliary spillways; repair of dam embankments; installation of a toe drain; and installation of walking trails. She said the total project cost was \$740,756.90.

Mr. O'Leary highlighted the draft Dam Safety Policy and said a DSP was recognized as a key issue in the Storm Water Master Plan (SWMP). Key questions posed from the SWMP include the following.

- Should the City investigate and identify the responsible parties for the inspection, maintenance, and overall safety of the dams?
  - \* **Recommendation:** Yes, beginning with dams judged to have the greatest public safety risk.
- Does the City want to take over ownership, liability, and maintenance from POAs or other owners to insure that dams are made safe and properly maintained?
  - Recommendation: Meet with OWRB to consider any hazard potential; yes to those that pose safety concerns or hazards; POAs maintain mowing and small scale maintenance; owners bring dam to state dam safety compliance.

Mr. O'Leary said the City has spent approximately \$350,000 of Capital Funds on the Hall Park Dam and another \$750,000 of Capital Funds on the Sutton Wilderness Park Dam. He said barring any other major repairs, he felt the City will spend approximately \$3,000 to \$10,000 annually on each of these two (2) dams.

Mr. O'Leary said the draft DSP also states that prior to taking on any additional responsibilities for a dam, the City should determine what actions the present owners need to take to bring the dam into compliance with applicable dam safety regulations.

Mr. O'Leary said public-private partnerships were also discussed as a common stormwater improvement funding strategy in the November 29, 2016, presentation from Freese and Nichols. He said such partnerships are formalized by cooperative participation agreements and include potential cost optimization; City cost-sharing; and City contract administration. Mr. O'Leary said at the December 6, 2016, study session Council discussed stormwater issues in the Cedar Lake Addition, the Summit Lakes Addition, and the Vineyard Addition. Mr. O'Leary said each neighborhood presents distinct challenges.

Councilmember Clark asked whether dam maintenance would include detention ponds and Mr. O'Leary said yes, it certainly can. He said among the 290 dams in Norman, the majority of those are detention ponds that are classified as low hazard dam structures. Councilmember Clark asked whether Staff knew the number of dams and/or detention ponds that are not being properly maintained to the point that it is resulting in flooding and/or damage. Mr. O'Leary said most detention basins are probably not being properly maintained, i.e., structures, flumes, pipelines, etc., as they should; however, not to the point of dam failure. He felt that was an entirely different policy discussion that Council needs to have as the SWMP also suggests that the City get involved in detention basin maintenance pertaining to infrastructure.

Item 2, continued:

Mr. O'Leary said many cities across the country are taking more interest in high hazard dams because of public safety.

Mr. O'Leary said in 2014, the Summit Lakes HOA hired the firm Cardinal Engineering, LLC, of Norman, to prepare the engineering plans, specifications, and cost estimates for the necessary dam repairs. He said also in 2014, seepage from the Summit Lakes Dam became visible to citizens and City Staff on the public sidewalk located north of the dam along Alameda Street. Mr. O'Leary said the estimated cost to repair that dam is \$700,000. Mayor Miller asked Staff the size comparisons of Sutton Wilderness versus Summit Lakes and Mr. O'Leary said both are approximately 60 acres in size; however, each dam inspection may find very different issues and determine very different repairs which can make costs higher or lower.

Councilmember Hickman thanked Staff for the presentation and said the SWMP states the City should stop short of taking over ownership and liability of the dams. He said he would support a policy or implementation plan that supports the SWMP, but felt the City does not need to be in the business of owning and/or maintaining dams located in Norman. Councilmember Hickman felt policy needs to include language about *not* approving developments (at the planning stages) that are to be constructed near the identified dams, i.e., a dam that can change from low hazard impact to high hazard impact due to a new development, thus adding probable loss of human life. He said he does not feel like certain areas located by the identified dams should be prohibited from development, but rather the City should be more proactive by noting such on City maps and making developers aware of the effects/impacts of developing near a dam and/or constructing a dam within a new development.

Mr. O'Leary said what Councilmember Hickman described is more of a development review process and said that very situation occurred last year during the proposed Destin Landing development. He said during the development review process, Staff requested the developer do an inundation evaluation to determine whether or not the dam at Cedar Lakes would become a high hazard dam since they were proposing a housing addition downstream from the dam. Mr. O'Leary said this has been an educational process for both Staff and developers that frankly had not been looked at or discussed 20 years ago, which was the case for the Summit Lakes Addition.

Councilmember Heiple said if the dam at Summit Lakes breaches, the Royal Oaks residents would be affected and Mr. O'Leary said Ward 6 would be the greatest impact area in terms of human life, traffic on Alameda, etc. Councilmember Heiple said this is a public safety issue and felt the dam at Summit Lakes needed to be repaired.

Councilmember Clark asked if the Emergency Action Plan (EAP) includes inundation maps, do the people who live in the inundation boundaries get notified and Mr. O'Leary said no, he does not believe there is a notification requirement; however, the safety officials who are signing the EAP are acknowledging that they, themselves, are the responsible party. Councilmember Clark said she would want to be notified if she lived in the inundated area and felt it should be a requirement. Mr. O'Leary said that is a great point and may need to be another part of the details; i.e., after the dam inventory is established and dam classifications are determined, the City would notify the property owners. He said the City currently notifies 2,000 property owners annually who are located in the floodplain and offers suggestions to consider.

Councilmember Holman asked whether the 24<sup>th</sup> Avenue S.E. Widening project would affect the J.D. McCarty Dam and Mr. O'Leary said no, it will not cause the dam to become any more of a hazard. Mr. O'Leary said currently there is an environmental evaluation underway on the project to make certain the new crossing road is adequate and the project will include a channel and flow design should there ever be a dam breach.

Item 2, continued:

Councilmember Clark said the City should consider conducting an inventory on the detention ponds because neighborhoods are flooding due to detention ponds not being properly maintained and Mayor Miller asked if that would be a policy separate from the Dam Safety Policy. Mr. O'Leary said the SWMP recommends an enhanced maintenance policy for all other water barriers, besides dams, also be considered. He said the HOAs would continue to own and maintain the water barriers, i.e., detention ponds, detention basins, etc.; however, the City could offer technical and/or engineering assistance and/or set up a 50/50 cost share program to incentivize the neighborhoods to obtain necessary and appropriate inspections. Mr. O'Leary said the HOAs do a great job of mowing the area around the detention ponds; however, the infrastructure is not being maintained properly, i.e., the pipes are settling and flumes are caving. He said the HOAs do not know how to make the necessary repairs nor do they have the money to complete them.

Councilmember Heiple said the property owners/HOAs feel the developer should handle necessary maintenance and/or repairs because the developers constructed the lake, pond, and/or dam. He said while this is a valid point, he understands the property owners/HOAs are responsible because the lake or pond is privately owned. Councilmember Heiple said the maintenance is typically very costly and conversations will be difficult; however, they need to be done and the City needs to start the education process now.

Councilmember Hickman said Section 9 in the SWMP outlines five (5) areas in the implementation plan and felt the City should use this as an educational tool to get a Stormwater Utility Fee approved and Mayor Miller and Councilmember Heiple agreed.

Ms. Joy Hampton, *The Norman Transcript*, asked whether the Dam Safety Policy will include the City being more proactive by increasing dam standards and maintenance standards and Mayor Miller said yes.

Items submitted for the record

- 1. Memorandum dated January 6, 2017, from Carrie Evenson, Stormwater Engineer, through Shawn O'Leary, Director, Public Works, to Honorable Mayor and City Council Members
- 2. Section 7.1, Enhanced Maintenance of Creeks and Storm Water Detention Facility from City of Norman, Oklahoma Storm Water Master Plan
- 3. Draft Copy of the City of Norman Dam Safety Policy
- 4. PowerPoint presentation entitled, "Dams in Norman," dated January 10, 2017

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The meeting adjourned at 6:26 p.m.

ATTEST:

City Clerk

Mayor