

RICHMOND CITY COUNCIL

October 18, 2005

The regular meeting of the Richmond City Council was held at the Community Building on October 18, 2005. The meeting began at 7:05 p.m. Mayor Kip Panter was in the chair. The opening remarks were made by Terrie Wierenga.

The following Council members were in attendance: L.D. Bowcutt, Allen Lundgreen, Terrie Wierenga, Cordell Johnson and Leslie Erickson.

FINANCIAL REPORT

JUSTIN: The auditors are currently working on the audit. They have gathered all the information they required with help from Chris, Marlowe and Boyd. They have been asked to have the audit information prepared to present at the November City Council meeting. This year we had to give the auditors more paperwork than normal but this was due to the fact that we changed auditing firms. Next year should require less time on our part.

JUSTICE REPORT

JUDGE SKIDMORE: The following is the amount of cases presented and money collected for July, August and September.

Total Cases Filed	111
Assessment	\$1,836.52
Court Security	\$1,797.00
City	\$9,053.00
Total	\$12,686.52

What should or can be done with the old computer and printer that were recently replaced?

MAYOR: We will advertise it "For Sale" and require a sealed bid.

JULIENE: That computer may be better than what we have in the library.

MAYOR: Please check into it and use it in the library if needed.

JUDGE: Juliene is headed to a Justice Clerk's Conference at the end of this month. The complaint that was recently filed against me has been dismissed. It was the only complaint directed at me in my 19 years of service.

FIRE DEPARTMENT REPORT

BOB HUGO: In July there was a fire on north State Street, it has been determined that it was arson. In August, there were some vehicle fires. September was a busy month. There were several tree and grass fires. A fire at the Palmer Ranch, Sadler's and up City Creek. The EMT's

responded to a couple of fatalities. There is currently some training occurring for the EMT's. Right now the EMT's and Fire Department are working very well together. The new County Fire Chief recently gave our department nine new pagers to use. They were free of charge.

MAYOR: Do we need more pagers?

BOB: We have enough pagers, but we do need radios. They cost about \$400 per unit.

MAYOR: Please secure a bid for the radios.

DEPUTY REPORT

DEPUTY EGGLESTON: Deputy Brandon Douglas and myself will be patrolling on Halloween. Please let me know of any problem areas that need monitoring. The coverage on Halloween will be from 6:00 P.M. to 1:00 A.M. Due to the high cost of gasoline other officers can only monitor their area, they cannot check other areas out of their area so there may not be as much coverage in the city right now.

MAINTENANCE REPORT

MAYOR: There were fourteen applicants for the position vacated by Gavin Little. The applicants went through a two-step interview process. Ben Lundgreen has been hired and started work on October 17th. Allen stayed out of the hiring process since Ben is his son.

MARLOWE: I have prepared a current list of items that need to be worked on. Gerald's last day of employment for this year will be November 11th. He will be back to work when he returns in the Spring 2006. Rob and Ben will be finishing filling potholes on Friday. There is training for both of them Tuesday thru Thursday of next week.

CORDELL: How much is available on the grant from B.R.A.G.?

MARLOWE: \$150,000 or less and the project must be complete within eighteen (18) months.

CORDELL: I have some information about adding an expansion to the Fire Station. I believe the addition could be accomplished for \$75,000 or less. The addition would have a metal body with a concrete floor. The bid does not include electrical or heating costs. I believe we should try for the grant. Terrie can you help prepare the necessary paperwork?

TERRIE: I need a survey of each residence and some prints of the Fire Station addition you are referring too. We could use USU students to complete the survey.

BOB HUGO: I have been informed that we will be receiving a new fire truck in the Spring 2006. It will require a 12-foot door to enter and is 52 feet long.

CORDELL: Should the Quonset stay or go? Maybe we could then add three doors rather than two.

BOB: Three doors would be much better than two. The Quonset should go!

MAYOR: Maybe we could sell the Quonset. Let's contact Christensen Construction and see if they have any interest and ask them to tell us what is involved in moving it or destroying it.

L.D.: Could the Quonset be used down at the Richmond City Maintenance Building?

CORDELL: Bob, let me know what we need as far as electrical for the new addition.

MAYOR: CDBG has certain guidelines that have exact dates. I know that a project manager must be appointed.

MARLOWE: December 2nd is the deadline.

CITY MANAGER REPORT

MARLOWE: For the protection of Richmond City, I'd like the following statement relative to the operation of the sewer lagoon formally entered into the minutes of this Council meeting, if you please.

For the past four years I have become increasingly involved in the sewage treatment for Richmond. In addition to being responsible for all of the local testing, considerable time has been spent in studying, both in formal texts and by learning from experts who run sewer systems, provide technical assistance from the Rural Water Association of Utah, or who serve the same function for the Division of Water Quality. I learned from our retired Maintenance Supervisor, Gavin Little, what he had been taught or instructed relative to our system. The cumulative result of all of this information caused me to make a decision yesterday, October 17, 2005, to abandon any attempt at running a combined parallel and series lagoon system as designed by Sunrise Engineering in 1998.

My studies have developed the following facts: 1) Our system was originally designed as an evaporative system consisting of four separate cells, each cell being six feet deep. 2) When the demands on the system caused the City to obtain a discharge permit, no changes were made to the cells or the system, a series type system where the wastewater flowed into Cell #1, proceeded through Cell #2, #3, and #4, then exited into the grasslands that then led to the ditch leading to the Cub River. 3) Within five years of the granting of the permit, the City was in violation of the discharge permit limits. 4) In 1998 the City contracted with Sunrise Engineering, working out of Afton, Wyoming, to develop the necessary improvements to bring the City back into compliance. 5) This work was completed in September, 1999. 6) The improvements consisted of installing a horizontal grinder and influent measuring system, installing a "splitter" which would allow the influent to be split between Cell #1 and Cell #2, and installing an Ultra-violet light system to disinfect the effluent. 6) Gavin was also told to allow all flow from one cell to another to occur through the overflow provisions at each box, to drain the cells as much as possible during the summer to provide storage space for the winter, and to draw the effluent only from the middle-level drain pipe leaving Cell #4. 7) Sunrise Engineering assured the City that we would be in compliance with our permit levels for at least eight years before additional work, specifically the introduction of an air injection system, would be necessary. 8) We were in regular non-compliance with our permit within two years. 9) When I first began working and learning about the system, I was told that the water detention time was close to 400 days. This past spring I calculated detention time based upon volume and current discharge rates and found that the detention time was a maximum of 108 days. Last week, as a result of some reading, I found that (due to a built-in "short circuit" in Cell #1 caused by the influent pipe coming to the center of the cell) the actual detention time is closer to 90 days. 10) In the natural processing of waste material in a lagoon system, algae is desired for the primary cell to provide oxygen for the aerobic biological breakdown process, with a decreasing amount of algae tolerable in the second of the four cells. 11) Subsequent cells (#3 and #4) should have markedly decreasing amounts of algae. 12) Properly operating lagoon systems should deposit about 2 inches of bio-solids per year on the bottom of the cell. 13) With the exception of Cell #1, none of the bio-solids have been removed from our lagoon since it went on line in 1972 - a 33 year period of time. 14) Cell #1

was dredged in 2000, with the dredging not actually touching the bottom to prevent damage to the clay seal. The bio-solid mass was a minimum of 20 to 24 inches deep with a cone at the influent point of about 4 feet 6 inches. 15) It is estimated that Cell #2 and Cell #3 have about 18 to 24 inches of bio-solid mass, with Cell #4 (based upon a visual check when this cell was nearly drained to facilitate the jetting of a partially plugged transfer pipe between Cell #3 and Cell #4 in September of this year) having somewhat less. 16) The only way this little of bio-solid mass can be accounted for after 30 plus years is the fact that the system is not working at all effectively, which is readily confirmed by the number of BOD and TSS violations we have on our monthly discharge monitoring report. 17) The upper 80% of the primary cell depth should be aerobic, the lower 20% anaerobic, with the algae in the upper 2 feet of the hydro. 18) Cell #2 can be essentially the same, but the amount of algae should drastically decrease in Cell #3 and #4. 19) The engineered split in 1999 was designed to have the flow from Cell #1 to Cell #3 go over an overflow, i.e., taking the algae directly from Cell #1 into Cell #3. 20) Because of the shallow depth of the lagoons, estimated to be four to four and one-half feet maximum, and the fact that diffused air is extremely ineffective at any depth less than eight feet, the addition of air to any of the cells would be inefficient at best and a foolish waste of capital at worse. 21) Because the hydro was routinely transferred via the overflow from one cell to another, the entire system is loaded with algae which accounts, in part, for the high TSS readings at the effluent as well as the extremely inefficient coliform disinfection rate via the UV system. 22) The routine draining of the system during the summer severely disrupted the continuity of the biological process, especially in light of the fact that the most efficient biological breakdown occurs during the warm weather. 23) The discharging from Cell #4 via the mid-level pipe drew from the area of algae concentration which also contributed to the high TSS count and resulting inefficiency of the UV system.

In light of the above facts, and recognizing that the system will not work as required by the permit no matter what we do, I nonetheless made the decision to operate the system in a strictly series manner, and am trying to stabilize the flow rate so that our daily effluent average will match our daily influent rate throughout the year. While overflow will be used between Cell #1 and Cell #2 (as the latter is currently on the anaerobic side), transfer between Cell #2 and Cell #3, and Cell #3 to Cell #4 will be taken through the installed gate valve at flow rate as close to the daily influent average as possible to estimate without a meter. Effluent will be drawn only from the bottom-level pipe recognizing that this may affect the Dissolved Oxygen (DO) level at the testing point. No matter what new system is decided upon, it would appear that we will have to make-do with the current lagoon system for another two years, give or take a few months. The above described decision seeks to give us the most effective biological process possible in an admittedly sub-standard atmosphere.

MARLOWE: In the 1980's or 90's, Helen Brooksby said there was an agreement for one water hookup from the main line coming out of Cherry Creek to Richmond City. The land involved is County land up the Cherry Creek road, and on the north side. It is close to be across from the next-to-the-last home currently constructed on the south side of the road. I asked if there was a copy of the agreement but she could not find anything. I need to check the City Council minutes once I can determine in which year (the 1980's or the 1990's) this alleged agreement was made.

MAYOR: I want you to take me up there and show me the area in question. Do not make any type of commitment at this time. I will contact Derwin Merrill and Marvin Traveller and ask

them if they know anything about this question.

MARLOWE: Concerning the house liability issue we discussed from last month, Bruce Jorgensen has said there is liability but there could also be problems if there is an eviction. There have not been any utility payments on the property in question for 3 months. We could turn off the water.

MAYOR: The City is not in the business of evicting people. Have Chris issue a shutoff notice if their utility bill is not current and past due. This needs to happen before November 1st.

MARLOWE: Senate Bill 60 will require our zoning ordinances to be up-dated to reflect current law. I attended a Rural Water Training meeting last Thursday in Tremonton. A Vulnerability Assessment is required due to the 9/11 attack if there are over 3,000 hookups in the water system. Because of the 3,000 number, I had put this on the back-burner but at the meeting I found that due to our USDA loan, we must complete this assessment anyway. This will require some updating on our part but I hope that the cost will be minimal. The UV System might be sold to a city in New Mexico with the help of Aqua Engineering. I will provide the information they have requested and we will see if anything happens. Tremonton City is currently using the STM Aerator (Option 4) for its sewer discharge. Paul Fulgham, the operator for Tremonton City, stated that the spray from the process caused ice buildup, which required shields to be added at an additional cost. It was quite a challenge, chipping the ice from the unit until the shields were installed. Paul is recommending the Membrane System as the upgrade for Tremonton City since their permit will be requiring phosphorus removal in a bit over a year. Their current STM Aerator has no provisions for phosphorus removal. The Total Maximum Daily Load (TMDL) for Richmond to discharge into the Cub River is being calculated and will be available next summer. TMDL and phosphorous will require major changes in our waste effluent situation within the next two years.

CORDELL: The Membrane System will answer our short-term needs as well as our long-term needs. It is the best solution to cure all of our problems but it is the most expensive.

MAYOR: I don't want to make any hasty decisions without all the facts being presented.

L.D.: I visited with a couple of members of the Richmond City Irrigation Company and they have an interest in trading irrigation water for culinary water. The only way to make this happen is with the Membrane System.

MARLOWE: We received our second Notice of Violation (N.O.V.). There could be a penalty of up to \$300,000 associated with it since this is our second notice; however, I have definite hopes that it will be considerably less due to our pro-active and cooperative attitude and efforts. The penalty is based on the number of violations, the severity of the violations and the daily load.

MAYOR: The Membrane System is the most expensive and could cause the monthly sewer rate to increase from \$23 to as much as \$40-45. The State of Utah will not step in and offer assistance until we hit the \$40-45 range per month. Each system has several plus and minus factors associated.

CORDELL: To make the other options viable, a 20-25 year agreement will need to be reached with Zan Harris.

MAYOR: The Membrane System will eliminate our phosphorous problem. The other options require a land application to deal with the phosphorous problem.

DAREK KIMBALL: I commend the Council for looking to the future not to the past. The

EPA will always be after something.

MAYOR: I have spoken with Zan Harris and Craig Allen about purchasing the land to the West of the sewer ponds. They would like to sell if we can come to a mutual agreement on price. Zan would have about 160 acres to use the discharge water to irrigate. Please keep in mind that the phosphorous problem still has a cost even in the Membrane System. Zan would be able to drain the cell in about 4 ½ days of irrigating.

L.D.: Will there be a wetlands issue?

MAYOR: There will be but I believe it is workable.

CHARLES CHISOLM: I believe it is good to wait and make an informed decision. Hyrum City has had some problems with the Membrane System. It is not perfect.

TUCKER THATCHER: Kevin Maughan from Hyrum City told me that any option less than the Membrane System could be a problem. If there are changes to the requirements of land application the other options may not work. I viewed the Membrane System at work and it is a neat process with a clean final result.

TERRIE: The Membrane System has low tolerance levels and is fragile.

CHARLES: I am currently working on a phosphorous project that will make phosphorous into pellets.

MAYOR: The system was built in 1972. The pond number one was dredged for the first time in 2000. It made some good fertilizer. The two options we have been considering are the Membrane System and the ATLAS IS and I think we should leave both on the table until the State forces us into one decision. We should continue to be open to any new ideas or any information on the current options being considered.

CORDELL: The cost of the ATLAS IS is about \$3,162,000 and Membrane System about \$4,120,000.

MAYOR: The Membrane System is the newest technology but is it still improving?

TIM SMITH: If I understand correctly the Membrane System requires no new land to be purchased but the ATLAS IS does require a land acquisition?

CORDELL: The City has enough land. The land acquisition would be for future usage.

MAYOR: I will be checking into a recent irrigation water situation I have been informed about. I was told some land was recently purchase for the shares of water in the Richmond Irrigation system to allow for approval of a subdivision in Providence. If this is in fact true, this is the first time water from the Richmond Irrigation company has been re-allocated to a different location for residential use. I believe this is a dangerous precedent. I'm also surprised that we have not been contacted or heard of a public hearing allowing protest of water change of use. I thought this would be required by the state before this could happen. I will try to follow up.

A motion was made by Cordell to choose the ATLAS IS System and the Membrane System as the two options for Richmond City to consider to correct the current Sewer System problems. Second by Leslie. The vote was unanimous.

SEE ATTACHED COPIES OF ATLAS IS AND MEMBRANE SYSTEMS

COUNCIL MEMBER REPORT

LESLIE: Don Webb will take care of the leaves. Starting next year, each Council member will have a Youth Council assistant. This is their project for the year.

ALLEN: Marlowe, what did you find out about the building lots by Clyde Hendricks?

MARLOWE: Tim Christensen is currently surveying those two lots.

ALLEN: One half of the CERT Team were recently in attendance at an EMT/Fire Department training session. I appreciate their help. A Neighborhood Watch Chairman has been selected and I will be contacting this person to see if they will accept this assignment.

MAYOR REPORT

MAYOR: A tentative agreement has been reached with Cingular Wireless on a cell phone tower to be located behind the Fire Station. The tower will be 110 feet in height or lower. The agreement will be for \$800 per month for five years. Western Ag Credit has completed the appraisal of the Zan Harris/Craig Allen property west of the sewer ponds. I will discuss this with Zan and Craig in the near future.

JEFF MITCHELL: On 800 South there is some road damage due to the construction project that need repair.

MAYOR: The contractor is required to repair any damage and we will follow up on it.

L.D.: Any problems must be fixed by winter so the snowplows won't be damaged.

A motion to pay the following bills was made by Leslie, 2nd by L.D., and the vote was unanimous.

A little something	170.42
Al's Sporting Goods	256.91
Appraisal Services	500.00
AT&T	127.62
Bear River Health	60.00
Bluestakes	44.53
Bureau of Emergency Medical	50.00
Cache Chemical	142.94
Cache County Service Area	12355.44
Cache Valley Crafts	128.74
Cache Valley	230.90
Chevron	230.72
Christensen Construction	1490.13
Concrete Jacking	375.00
Dan	300.00
Denny's	92.27
DJKK Services	800.00
Elk Ridge Dust Control	3880.00
Ferguson	496.22
Hall Oil	192.00

IPACO	62.40
James Doherty Co	422.50
JUB	2023.50
Kids Discover	19.95
L. D. Bowcutt	6.38
LD's Café	749.29
Lee's	501.6
Les Smith Construction	3440.00
Logan Regional	95.00
Lower Food	122.96
Lyn Distributing	171.65
Maverik	665.13
Medtronic	296.00
Metrocall	9.69
Mountain States Waterworks	3457.50
North American Salt Co	6125.7
North Cache Vet	46.20
Ohio Distinctive Solution	28.00
Olson & Hoggan	2246.00
Parsons	445.00
PC's Unlimited	21.95
Penworth	91.81
Peterson Plumbing	2511.88
Pizza	282.18
Postmaster	102.00
Proteus Enterprises	99.00
Questar	100.43
Qwest	448.37
Qwest Internet	75.27
Randy's	14.92
Robertson Manufacturing	220.00
Smithfield Auto	87.18
Smithfield imp	387.02
Staples	69.08
The Home Depot	293.76
Theurers	2359.90
Thomson Electric	35.06
Time Rental	19.00
Utah Dept of Workforce	934.12
Utah Local Government Trust	479.54
Utah Power	2376.27
Verizon	89.92
Visa	40.77
Waldenbook	323.14
Xerox	244.19

A motion to adjourn was made by Cordell, 2nd by Leslie, and the vote was unanimous.

Adjournment at 9:15 P.M.

Kip E. Panter, Mayor

Justin B. Lewis, Recorder