Bill Jacka, Chairman opened the Public Hearing with reading the Legal Notice as follows:

NOTICE is hereby given that the Public Utility Advisory Board will hold a Public Hearing on Tuesday, January 22, 2013 at 5:00 P.M. in the Commission Chambers, 405 W. Third, Truth or Consequences, New Mexico to receive input regarding the following:

Presentation by Smith Engineering – Waste Water Plant Rehab Project - To inform the public of the City’s intent to file an application with USDA, Rural Development and the New Mexico Finance Authority. The purpose of the application is to request financial assistance to improve the Wastewater Treatment Plant system of the City of Truth or Consequences.

Below are verbatim transcripts

David Schwent, El Water/Wastewater Practice Project Designer, stated that there was a Preliminary Engineering Report done on the Wastewater Treatment Facility, and tonight’s presentation will summarize their findings, and review what their recommendation is for the improvement process.

The existing Treatment Plant was built in 1976 or 1977, with the original design flow of 1.6 million gallons per day. The headworks, grit removal, and sludge pumps were later added in 1996 to upgrade the system. Typically, Treatment Plants will last 30 to 40 years, so the existing Treatment Plant is coming to the end of that lifespan. At the moment the operators are dealing with more O & M, and increasing costs for operations, than what you would ideally want to have. Due to all of the parts like the aeration rotors, for example, and sludge processing, can be made more efficient. The solids handling, at the Treatment Plant currently creates odor that would be nice to minimize that they are also currently disinfecting with chlorine which has chemical costs associated with it, but also safety issues. The rotating aerators there are not the most efficient aeration process, and they also compose safety problems. The aerators are easy to slip and fall, and come in contact with. At the moment, the Plant is meeting its NPDES discharge limits for the quality of the effluent going into the river, but in the future there are going to be more stringent limits particularly in regards to nitrogen/phosphorus, so there needs to be upgrades to address that. The Planning period that we looked at in the PER for the different alternatives to upgrade the Plant is a 20 year planning period starting from this year to 2033. The sewer collection comes in from both Truth or Consequences and Williamsburg into the headworks; from there it goes into a grit chamber that is the electrical control center of the plant. The Wastewater from the grit system goes into the Oxidation Oval where the primary conversion of the organics (Solid Waste) occurs; from there it goes into the secondary clarifiers. Effluent from the secondary clarifiers is decanted off, and goes to the chlorination; from there it is de-chlorinated, and ultimately sent through effluent metering, and onto the river. To re-use solids that are wasted from the clarifiers are removed with sludge pumps to the vacuum de-watering beds, and from there they are taken to the sludge processing pads for composting and ultimately removed from the site. The Plant has things that are in good condition, medium condition, and bad condition. Items that are in good condition are the headworks that were recently added in 1996. The grit chambers are in good condition. Fair condition, are items that need some amount of rehabilitation, but can be re-used. The Oxidation Oval concrete needs to be rehabilitated, but it can still be used for treatment in the future. The Sludge Pump Systems are in good shape, but that could be rehabbed to do a little bit better. The Effluent Metering is fine, so that can be re-used. The facility buildings, there are a lot of problems with lights, painting, and interior floors that in general, need to be upgraded, but can be re-used. The secondary clarifier, chlorine contact chamber, sludge vacuum beds, and brush aerators should be replaced. It is not easy to replace the Brush Aerators. There are significant structural concerns with one of the clarifiers. Ultimately these cannot be used in the future. The condition of the chlorine chamber is also not good. In general the chlorine equipment is old, and it would be better to move away from chlorination to a safer process. The vacuum beds are old, and in need of replacement, and in general that is an expensive process. The system does not remove enough moisfer from the sludge. It would be better to upgrade it, and move to a more efficient de-watering process. At the moment the Plant is operating between 75% - 90% of its original design capacity. The future Plant improvements will have an increase capacity up to 1.3 million gallons per day. The process that is currently in the plant; do a good job of reaching nitrification, but are not good at de-nitrifying so the plant
should be improved, optimized the nitrification, and de-nitrification treatment process, especially with the upcoming limits. Those limits are anticipated to be 10 mg per liter for total nitrogen, and 3 mg per liter for total phosphorus. The existent plant will not be able to consistently meet that so the upgrades will have to be made to be able to achieve that. The clarifier structure is the chlorine contact basin that structurally needs to be replaced. The structural concrete of the oval also needs some rehabilitation. Ultimately the sludge processing needs to be improved, reduced order, and also reduce some O & M efforts, especially labor. The new upgrades to the plant will include other de-water equipment, and will increase the size of the sludge processing pad; which will allow them to handle more sludge more effectively. Also as far as the new design, we’ll put in more digester basins which will help to bring down the volume of that sludge, and ultimately with better nutrient removal, we will be able to make odors less of an issue, and make processing the sludge more efficient. In addition with better nutrient removal, we will have a greater opportunity to use more effluent for re-use. We propose that there be an upgrade in the sludge processing. In general the construction cost is 7 million dollars. The engineering fees associated with that; are estimated to be 1.2 million dollars; for a total cost before taxes, to be 8.2 million. If you add in the NMGRT you have 8.9 as the estimated total project cost for these improvements. It looks like Truth or Consequences is going to have to increase their rates in order to pay for some of the improvements. At the moment the rates are estimated at $7.00 and will need to be as much as $24.00 to cover costs associated with the upgrade.

Dave Laughlin PE Water/Wastewater Practice Project Manager came before the podium, stating if the City had to pay for all of the proposed improvements, the rates would likely triple, but realistically that’s not going to happen. Currently we’re looking at several funding options which should provide the City with a significant portion of that money coming in the form of a grant. After completing the preliminary engineering report we are working on the environmental clears process, there’s an ameba process that has to be completed, and that process is currently underway. So we are getting environmental clearances for the area around the Wastewater Plant where we will have to expand a little bit in terms of the Plant. Hopefully, that will be completed within the next several months, and after we identify where the funding is going to come from; then the design process can begin. As far as funding goes; the City officials as well as several of us from Smith Engineering, have been meeting with multiple funding sources including... New Mexico Finance Authority, US Department of Agriculture, the Colonias programs, etc.... We are working to identify loans, grants, and loan grant combinations. Currently we are working on the application for the New Mexico State Colonias program which is overseen by the New Mexico Finance Authority. The application is due in March, and we are working on getting all the components together for that. We are also getting components together for USDA Colonias program as well, and as soon as we get those components together we will get those applications in. Hopefully that will go in fairly quickly after the State Colonias application is due. So hopefully in March, or early April, we will get the USDA Colonias application in as well. We have already applied for funds from the States Clean Water Revolving fund. That application was submitted in 2012. We also applied for state appropriation funds. Hopefully in the next several weeks we will hear if there are any State funds that can potentially be applied to the Wastewater Treatment Plant improvements. Other options include looking at Rural Infrastructure loans, and there are several other programs with USDA that we will look into as well. I am going to answer several questions we received through email starting with... The Wastewater Treatment Plant is currently located next to the river. One of the questions was is the Waste water Treatment Plant in danger of being flooded. The short answer is no. Theoretically the ground elevation at the Treatment Plant is within the 100 year flood zone. If you look back at the original design in 1976, the critical components are built up at least 5ft above, when you first walk into the Wastewater Treatment Plant. The oxidation oval, the clarifiers, and the emergency overflow basin, is pretty much the whole components of our Treatment Plant, and are about 5ft above the current flood elevation. The risk of flooding is pretty minimal at this point. The nice thing about the location of this plant is that it is between two hydraulic control structures. You have the Elephant Butte Dam, which is upstream, and you also have Caballo Dam which is downstream. Those dams are there to control the water level in the river. Another question that came up was the nutrient removal approach. The installation of an anoxic basin at the beginning of the treatment process will allow for effective nitrogen removal, as well as effective phosphorus removal. Another question that was asked has to do with primary treatment. Most small Wastewater Treatment Plants don’t include primary treatment (primary clarifiers), primary clarification is definitely necessary when you start getting into much larger flows like 10 MGD Treatment Plants and above. One of the drawbacks from the primary treatments is the odors associated with primary clarifiers, and so with small plants you strictly try to stay away from that primary treatment as much as possible. What it can lead shows sometimes, by not having that primary treatment is you get some floatable material that works its way into the Treatment Plant. One of the key things we will be doing when dealing with the proposed improvements would be installing new clarifiers and those new clarifiers would have surface skimmers that the current
clarifiers do not have. That’s really a critical component when it comes to clarifiers, and so by
having those clarifiers there you wouldn’t have the ability for those floatables to pass through the
clarifiers, and into the disinfection system. As far as the UV disinfection, there was a question
that if the UV disinfection system would be able to respond to changes in the water quality. For
example if you had a situation where you got some excess peak flow coming through the plant
and you had a little bit extra TSS would the UV system compensate, and the answer is yes. The
UV systems are typically designed to have 100% safety factor so typically you’ll end up with 2
banks of UV Bulbs, and what happens is usually you design an section where one UV bank is all
you need for full flow and then if you get a peak flow going through the plant the UV system
actually operates by looking at the flow rates going through the plant so if all of a sudden you get
a surge in flow going through the plant the UV system based on it’s PLC will automatically
compensate and turn the those UV banks on, and it actually can turn them on to high power
medium power or low power and so it will essentially will automatically compensate and turn
them both on for full power to make sure that you get the disinfection and kill that you’re
looking for with that UV system. They don’t typically respond to based on turbidity meters, but
if you design that into your system you can have that as one of the inputs to the PLC control.

John Saridan asked about the turbidity with UV system, say one of the clarifiers go out and start
belching out sludge. It’s not going to address that issue right?

Dave Laughlin stated unless you design it to include a turbid meter that’s connected to the PLC.
It can be designed that way. Those are some design issues that you would work through once you
get into the design phase of the project.

Dave Laughlin continued… With the backup generators, with any Waste Water Treatment Plant
obviously you have a critical process that’s occurring. The question was, whether the existing
backup generator has the capacity to run the treatment plant, and the answer is yes. The current
diesel generator is in very good condition and it has the ability to handle the critical loads that
will be placed on it during a power outage. What would happen during a power is, you wouldn’t
necessarily be able to run all the components of the treatment plant but you would be able to run
your critical components.

Mike Kertesz asked about the watering press, it’s a new piece of equipment and you’re going to
increase the size of the drying beds. Is there any way that you can tell us how much odor is going
to be reduced by this process because if we have to count upon any community support it would
be nice to say the odor is going to be reduced 50% or some percentage. He also stated he saw all
the grants that were applied for, but in order for us to get these grants we have to be declared
Colonias. The County only meets once a month, are we going to make the dates?

Bill Slettom, stated application has been submitted to the County. He is not for certain if we are
on the agenda or not, but we are pursuing that.

Dave Laughlin stated based on our experience with waste water treatment plants he would say
that the odor will be reduced by approximately 75 %. The major problem that you have is that
your sludge is so moist and you have to dry this un-digestive material on your pads on a
consistent basis. As soon as we have a digester and a Belt Filter Press, will easily get that odor
reduced by at least 75% because you’re not going to have to spread it out and dry it out.

John Saridan asked how many gallons of Hot Springs Water are currently going to the
Wastewater Treatment Plant.

Dave Laughlin stated he they do not know. In the preliminary engineering report there was a
specific portion that they looked at. They looked at the population and waste water flows from the
population. They also looked at the amount of water being used per capita fresh water. If the
City of T or C is using a million gallons of fresh water a day then typically you should see
anywhere from 75% to 100% of that water going through the Treatment Plant. We also believe
that that there are some un-metered flows coming from personal Hot Spring systems. We think
that most of the commercial Hot Springs they obviously have a ditch where they discharge to.
Some of the private Hot Springs likely those have been piped into the sewer system and so we’re
getting water from those private bath houses that’s showing up at the Waste water Plant. As far
as being able to tell you we know its .75 MGD every day, or .15 MGD, or whatever it is, we
don’t know. We simply addressed in the PER in terms of something that possibly needs to be
looked at in another study, but we can’t say for sure what that volume is at this point.
David Schwent stated that in the PER we identified a range of the I & I being between 50 & 210 gallons more than what consumption can account for, but we don’t know what portion of that would be the un-metered spa flows from private residences.

Dave Laughlin stated that number includes both un-metered flows possibly from Hot Springs as well as just I & I. You have sewer lines that are still made from the original pipes and those are the kind of sewer lines that over time, they really need to be replaced with PVC lines, because we know we have a significant portion of just ground water that’s slightly coming in from the sewer system just from cracks and breaks in the sewer lines.

John Saridan asked is the City going to start enforcing them to go into these Hot Spring channels, how are we going to solve the street flow problems.

Bill Slettom, Community Development director stated tomorrow night there will be a presentation at 5:00 P.M. the thermal water study group is going to start presenting their preliminary findings and we are going to address further studies to identify all of the sources of thermal water going into our system. It should be part of our code to enforce that. We want to be sure that everybody that is discharging into our system is paying their fair share.

George Szigeti stated that even though the hot springs water naturally goes out into the Rio Grande River. As soon as you run it through a spa, and then you want to re-release that water then it comes under NMED and EPA restrictions, and the spas that are currently discharging for the hot ditch are grandfathered in by the EPA allowing them to do so. If you wanted to have someone else discharge their water to that you would have to go to get EPA to get permission. If you start messing around with that we may lose permission to lose the hot ditch all together.

Bill Jacka, Chairman stated that there are three 3 other flood control projects that cover this area.

John Saridan asked what happens if the funding falls through.

Dave Laughlin stated if our plan for full funding of the improvements does not come to fruition then our backup plan will be to continue to work with the funding groups we’re working with and to simply get whatever funds we possibly can and to prioritize the installation of improvements over time. The NPDES permit is up for renewal in 2014, and your next permit will have total nitrogen and total phosphorus limits. Some of these improvements are going to have to have that at the plant.

George Szigeti asked when the last time the sewer upgrades were.

Dave Laughlin stated the table in the handout shows if you look at the facilities that have the stars by them such as Alamogordo, Bernalillo, Jemez Springs, and Elephant Butte have all had Wastewater Treatment Plant Improvements within the last 5-10 years, and you see the difference in their base rates compared to the towns that have not had Wastewater Treatment Plant improvements over the last 10-20 years, with any Wastewater Plant Improvements there will likely be some rate increase.

Bill Jacka, Chairman called that they close the Public Hearing, and move onto the regular meeting.
TIME & PLACE: The Public Utility Advisory Board of the City of Truth or Consequences, New Mexico, in the County of Sierra, and State of New Mexico, met in Regular Session in full conformity with the Law and Ordinances of said Board, at the Commission Chambers of said City, on Tuesday the 22nd day of January, 2013 following the Public Hearing.

PRESIDING OFFICER: The meeting was called to order by Bill Jacka, Chairman and Angela A. Torres acted as Secretary.

ATTENDANCE: Upon calling the roll the following members were reported present:

Bill Jacka, Chairman
Mike Potia, Vice-Chairman
Alvin Siffring, Member
George Szigeti, Member

Also Present:

Bill Slettom, Community Development Director
David Laughlin, PE Water / Wastewater Practice Project Manager
David Schwent, El Water / Wastewater Practice Project Designer
Linda Lanham, Finance Director
Jesus Salayandia, Waste Water Director
Kim Featherlin, Waste Water Treatment Plant Chief Operator
Gil Avelar, Electric Superintendent
Jimmy Capps, Sierra Electric Coop General Manager
Angela A. Torres, Deputy City Clerk

Absent Were:

James Hunt, Member

QUORUM: There being a quorum present the Board proceeded with the business at hand.

APPROVAL OF AGENDA: Bill Jacka, Chairman called for approval of the Agenda.

"Alvin Siffring moved approval of the Agenda as submitted."

Seconded by Mike Potia
Motion carried unanimously.

APPROVAL OF MINUTES: Bill Jacka, Chairman called for review and approval of minutes of the Regular meeting held Monday, December 17, 2012.
“Alvin Siffring moved approval of the minutes of the Regular meeting held Monday, December 17, 2012 as submitted.”

Seconded by George Szigeti
Motion carried unanimously.

COMMENTS FROM THE PUBLIC:

Mike Kertesz came before the Board with concerns regarding the amount of hot water going into the sewage system, and he believes something needs to be done about the significant amount of water we’re losing.

Kim Featherlin, Waste Water Treatment Plant Chief Operator stated that there is so much water flowing into the plant that the tiny bit of water flowing in is not going to hurt anything.

Dave Laughlin stated they currently submitted a water trust board application with New Mexico Water Trust Board to get funding to do two studies. One is to put in an asset management plan and the second is to do a preliminary engineering report for the water system. The goal with both studies is to create an inventory of all of the assets within the cities systems, to identify the age, and type of the pipes.

Bill Slettom, Community Development Director stated we’ve also submitted application for capital outlay through the ICIP program for Water and Wastewater line replacement.

Alvin Siffring stated that our Board does not normally answer questions from “Public Comment” however; a large portion of water that is produced and not sold possibly ends up in sewer lines due to the aging infrastructure.

CONSERVATION STUDY:

George Szigeti reviewed the Net Metering System with the Board.

Jimmy Capps, from Sierra Electric Coop stated that the previous City Manager Dave Weiser spoke with him a few times regarding the Net Metering System, and the Coop currently has 15 net metering customers, and a total of 76 KW. He reviewed the cost of Net Metering with the Board.

FINANCIAL REPORT:

Linda Lanham Finance Director reviewed the Water and Well Report with the Board.

Ms. Lanham stated she would like to bring Julian Garcia and Leonard Carrillo, into the next meeting to go over their reports for the Water and Sanitation.

The Board had concerns regarding the graph on the well report.

Linda stated she would look into the report, and get the corrections to the Board as soon as possible.

Alvin Siffring asked that the dates be added to the Well, and Water Reports.

Jesus Salayandia, Waste Water Director reviewed the Waste Water Rehab reports with the Board.

Gil Avelar, Electric Superintendent reviewed the Williamsburg Project with the Board.
ADJOURNMENT: There being no further business to come before the Public Utility Advisory Board Bill Jacka, Chairman declared the meeting adjourned.

APPROVAL: PASSED AND APPROVED this 19th day of February, 2013, on motion duly made by Mike Petia, seconded by Joe Smith, and carried.

Bill Jacka, Chairman
Public Utility Advisory Board