

State of Texas

County of Brazoria

City of Freeport

BE IT REMEMBERED, that the City Council of Freeport, Texas met on Monday, September 23, 2024 at 6:00 PM at the Freeport Council Chamber located at 430 North Brazosport Blvd. , Freeport Texas for the purpose of considering the following agenda items:

City Council:

- Mayor Jerry Cain
- Councilman Jeff Pena- Absent
- Councilman Jarvis Davis
- Councilman George Matamoros
- Councilman Winston Rossow

Staff:

- Lance Petty, City Manager
- Clarisa Molina, City Secretary
- Cathy Ezell, Finance Director
- Toby Cohen, IT Manager
- Crystal Ruiz, Executive Administrative Assistant
- Rudy Ragle, Public Works Director

Visitors:

- Manning Rollerson
- Chad Nobles

Call to Order:

Call to Order - Jerry Cain, Mayor

Mayor Cain called the meeting to order at 6:00P.M.

Invocation - Councilman

Councilman Rossow led the Invocation.

Pledges - Pledge of Allegiance to the United States; Pledge of Allegiance to the State of Texas.

Councilman Rossow led the Pledge of Allegiance to the United States and the Pledge of Allegiance to the State of Texas.

Audience Participation – Anyone who has registered to speak prior to the meeting being called to order and desires to address the City Council will be heard at this time, or during the discussion of an item listed on the agenda. These forms are located by the City Secretary. After completing the form, give it to the City Secretary. She will give it to the Mayor. The Mayor will call on you when that item is presented, once a motion has been made by Council then public participation will not be allowed. You will have four (4) minutes minutes to make your comments regardless of the number of agenda items to be addressed.

There was no audience participation.

Business

Presentation by Ameresco for the implementation of an automated water metering system.

City Manager Lance Petty said in February 2024, staff completed a workshop with the City Council members pertaining to a number of items for discussion. He said the inaccuracy of the water meters was an item discussed. He said the Council approved staff to move forward at that time with Ameresco for an accurate study of the water meters system. He said the study was completed and confirmed the inaccuracies. Mr. Petty said Mr. Nobles is presenting an option to correct these inaccuracies with a total automated meter replacement project and costs associated with it.

Chad Nobles with Ameresco presented to the Council the implementation of an automated water metering system. Mr. Nobles said the idea is to have a water meters in the ground, that water meter will have a radio on it, and that radio will actually send a signal up to two water towers. He said there is going to be a black box mounted on each one of those water towers. He said the radio sends a signal to the actual black box, the black box goes out to the cloud, and from the cloud staff will be able to generate a bill. He said citizens will actually have a customer portal where they will be able to pull up on their laptop or their phone and see usage of what their meter has been doing or how their bill looks or what it is projected to be, and the alarms that come on whether they have continuous water usage which could be a leak or if they would like to set an alarm for a high flow and low flow those type of things will actually all come up. Mr. Nobles said if, for some reason, a hurricane comes and knocks down one of those towers, there is the ability to still drive the City and actually still read it as a backup if needed the next day. He said some of the meters will actually, instead of having a fixed base radio which goes to those two black boxes it will actually have a cellular radio on it and so, it would be considered a hybrid solution and so, instead of going and putting one of those new towers up with a box on a collector they are filling holes in coverage meaning there are a couple of areas of the City one or two meters that are not picked up by these towers and so instead of buying another black box and sticking down there just to pick up four or five meters a cellular radio will be put there to keep the costs down and able to expand and still get the coverage and the readings needed.

Mayor Cain thanked Mr. Chad Nobles for his presentation and all the hard work put into this.

Councilman Rossow asked if everything was inside the box for residential? Mr. Nobles said for residential the only thing that is outside the box is that little hockey puck that will sit right on top of the lid, and it will actually be through the lid, and it will just sit flush mounted on top of the box itself, but everything else will be inside the meter box. Councilman Rossow said Mr. Nobles mentioned an antenna. Mr. Nobles said the flat piece was through the lid of the meter box and just sitting flat on the desktop. Councilman Rossow asked if we had to worry about lawnmowers? Mr. Nobles said no. Councilman Rossow said they are always trying to get to pay extra for gas and water lines being broken and asked if Mr. Nobles would be replacing the PVC or will they be using the existing PVC to put this new meter? Mr. Nobles said yes they are going to, basically in a perfect situation they go to the meter box, and they undo the meter and pull the old meter out and put the new meter in, then drill a hole or either buy a new lid, because for a lot of them, the lids will have to be replaced so they will have a new lid that is actually got a pre hold drill on it and run that through that hole, connect it up to the antenna, collect all the data, collect about ten different pictures of every site to protect the City and us of what is being doing in this site and make sure all the data gets transferred over properly and then move on to the next one. Mr. Nobles said there are times when they go to pull on that meter and that pipe breaks just because it is old, and so they actually have to re-fix it at that point. He said in most instances the water is only off less than 15 minutes at each site if we do our job correctly, we do the prep, we do everything first and are just off about 15 minutes, but obviously, if we break a pipe the water will be off a little bit longer. Councilman Rossow asked if citizens still call City hall if there are any problems with the meter? Mr. Nobles said during construction they will obviously have one of the things that they do is a communication plan that goes out to the citizens and staff and, it will have possibly asked frequent questions and may even create a video if they want to on what a typical turn key installation looks like for residents, but they have kind of have a knock on door policy where we would actually go up to the meter, check and verify everything and then go knock on the door and if somebody comes to the door we

hand them a letter that they have created that staff has helped create and will say here is what we are doing, we are here to change out the meter, and if nobody is home then we go and take care of it but obviously if that meter is spinning we basically go knock again if nobody comes to the door we skip it, and then we come back and if it is still spinning, then we put it on a different list. Mr. Nobles said he has a full-time on-site construction manager that will be living here during this construction period, and he will be responsible for getting that individually scheduled, and if there are any issues when we leave, we leave a door hanger on the door, and it has a phone number on it and that phone number is usually our after hours number because we want to be the first call at that point, and it all depends on how staff wants to handle that and how they want to record and log that. He said unfortunately, we are all human, and sometimes we may leave the valve off, and we have to go back or maybe when we went to pressurize it did not pressurize meaning it did not stop spinning, and we do not want water to keep the flowing and we do not know where water is going so we will turn it off and leave a tag that says we left the water off on purpose because it was spinning and this has happened where somebody is in their house, and we are outside changing the meter, and they are like oh no water oh that is right they are changing my meter and they leave it on and then they leave and when he goes to put the water on, turn it back on all of a sudden now I got water flowing and I do not know where it is going, so I turn the valve off to not flood a home. Mr. Nobles said there are lots of processes in place that are our standard operating procedures and some best practices that we use to make sure that we try to have minimal downtime for residents as well as minimal interruptions to staff because they have their normal job, and so we handle all the data integrations all the on site field work. Mr. Nobles said, for the cellular device, all you would see when you open your box, if you had a cellular endpoint, you would see a little gray box that you will actually see on the top from the ground is the actual antenna sticking flush on the top. He said you can look on your phone for the usage or leakage or whatever, but in other words, you could turn your faucet on and be able to see it and it is not real time because this radio sends a signal every so often and then they are pushed up and so the data is roughly four to six hours old is usually what that is. Mr. Petty asked how often they read? Mr. Nobles said daily, it is hourly and reads what is going to come in and you would actually get data that is transmitted four times a day for this manufacturer, and then it is updated, but you actually get hourly reads that come in, so you would have 24 periods of water and, so or not you have had continuous consumption or you read 100 gallons or 50 gallons or whatever. Mr. Nobles said the other thing that you get asked down here on the coast is that a lot of times, comes up what happens if a hurricane comes through, is the data lost. Mr. Nobles said no, the data is actually stored in the gray box or in the meter itself and every four to six hours that is pushing out there is another data collector, that gateway and there is data stored there too, and this particular one stores 72 days of data, it is still quite a bit of data, that is stored so even if you do have a hurricane and it knocks you out for a week you are still collecting the reads and actually reading the data, and it is just not being pushed out because there is no power for servers and clouds and stuff. Mr. Petty said he would assume the 700 meters Mr. Nobles was talking about for cellular are going to be like in our Bridge Harbor subdivision maybe the golf course area. Mr. Nobles said the golf course area definitely has some. He said there is a pocket out there and outliers that are actually not covered by the actual gateway. Mr. Petty asked if there are any additional-associated fees with the cellular? Mr. Nobles said it is all built on a hosting fee of \$19,000, and it is part of the fee structure. Councilman Rossow asked if this is the latest and greatest? Mr. Nobles said it was. Councilman Rossow asked across the nation? Mr. Nobles said, of course, he said staff actually evaluated four different manufacturers and had them come in and do presentations and actually also got pricing from four different ones and this is where we ended up. He said this product is actually one of the newer products that they use to fill gaps and holes that are out there, and they are manufactured in the US and Neptunes is the only manufacturer that still has a foundry in the US, and so they actually make their brass and all their components are made in Alabama, and they have been around a long time. Councilman Rossow asked if that was the plant? Mr. Noble said yes. Mayor Cain said he is all for paying for a gallon of water if he uses a gallon of water and it is no different from if he goes down and fills up his truck he feels like paying an honest price for an honest quantity is a must. Mayor Cain said one other place where he feels like this would be beneficial is there was a water leak on 10th Street that went on for about a month or so and there was a lot of finger pointing because the leak of course is underground and with this being able to look at the data it could have determined a month ago instead of a

month later and could have found it instantly. Mr. Nobles said we also see a lot of times where because staff even only have one piece of data every month that they get to see as well and now, with having this daily read, they can actually understand where water is being pushed out and then actually reconcile that and if they see a group of area that is maybe has a leak and say they are pushing water here, but it is not recording why is there water loss in this area and what we see a lot of times is you can also isolate certain areas or neighborhoods or parts of town to proactively replace bad lines if you have lines that you see a lot of loss in because they are pumping so many amount of gallons and not reading them from all the meters that are downstream of this, and we know we probably got some line losses, and now we need to strategically go replace those line losses and so there is a lot that staff has the ability to do with this data and can also get real tight on the monthly reporting that you do to TCEQ that they have to report on there is lots of things that they will be able to use this data for. Mr. Petty said this helps with the unaccounted for water loss, which is a big factor when we go out to Texas Water Development Board for grants and things like that, for infrastructure you have to meet a certain requirement, on your water loss and so, if you have these old meters in the ground that are not picking up your low flows and things like that you have a large amount of unaccounted for water loss that may disqualify you from getting those grants and so it is very important to get control of that. Mr. Petty said he has been part of about four of these systems before similar to this, and they are very customer friendly and, like Mr. Nobles was saying the residents like it because they can actually monitor their water, and they can set up times when they are on a budget, and they need to set it at a certain gallons per month, and so it will notify them to start backing off, because you are getting to the point of, shut off time, and budget wise it is really customer friendly, and it knocked out a lot of confusion with residents and everything else because they can actually go online and see graphing, and it is an important tool. Mr. Petty said he has done these changes before but he also did the entire meter boxes and has put gravel in them and has done a lot of things to try to protect things and keep water out of the holes and knows the industrial vaults if there is any of them that might need sump pumps put in them or things like that to keep the water pump down on a float system or something just to protect the investment on it. Councilman Davis asked if anybody else in the area is using this system? Mr. Nobles said he has put in systems over the last few years in Conroe, Rosenberg, Bay City, and El Campo. He said he was trying to think about who does not have an AMI system in the area, but almost everybody has an AMI system down in the areas now, and so Freeport is kind of one of the last cities to not have one. Mr. Nobles said some people are using drive by systems, which is what Freeport has, which is good, but to go to full AMI, that is where everybody is going. Finance Director Cathy Ezell said Freeport does not have the drive by system but the wand. Mr. Nobles said he believes Clute has an older system, and he has spoken to them, and they are also looking for an upgrade and is not sure what system Lake Jackson has. He said this technology of AMI system he has probably put in one of the first ones his team did was probably twelve years ago. Mr. Nobles said one of the first drive by systems was put in was 16–17 years ago and the team that he worked with as part of his staff has probably done over 100 different systems in Texas. Councilman Davis asked what the estimated timeframe is? Mr. Nobles said once they get material he knows residential meters, they actually have improved their lead time and are seeing residential meters in 2 to 3 weeks now, but the two inch and one inch and a half have a little bit longer lead time and, so maybe three months. He said if the Council decides to move forward they would start the infrastructure, and it will take a couple weeks to stand that all up and get all the software, and so the first month is actually doing all the prep work and all the data files, and then the execution of this he is estimating roughly three to four months would be done with construction and they typical average 300 to 500 meter a week, and it depends on some parts of town may go faster than others there will be a lot more digging and if replacing boxes it may slow down, but he is expecting three to four with construction. Mr. Petty asked if Mr. Noble's field crew inputs all the information onto the field, and then it is integrated right then into the utility billing system? Mr. Nobles said yes, as he mentioned his staff actually goes, and we have a tool that we use to actually collect pictures, and then we record all the old read information off the meter, and we put all the new data in that actually is physically sent right then and there. He said before they can go to the next one, they have to upload all that information, and it goes into a work order management system that work order management system once it hits the cloud, the staff can actually see exactly what took place at that resident before moving to the next one, and they will see the pictures and

stuff and then once a week that data is transferred over into the CIS system into the billing software and then a file spits it out and tells us if we got any errors and if not that system is ready to read the very next week. He said they would go through the city route by route, and will be working in a couple of different routes because we have to get behind when you are manually reading the process and will train staff as we start implementing those routes, and will start using this system to read immediately as it is being installed. Mr. Nobles said that the challenge is that you do not know how you use that water if you did use it or not, but with this system you will be able to see what your daily profile is. Mr. Nobles said he has seen some that where basically says there is no way I could use this water and all of a sudden you say well, on December the 13th, you use 5000 gallons of water and can you think back and say I filled up a pool, or I busted a water line. He said a lot of times it happens in the summer where you left the water hose on all night long, and you did not realize it and you go, Oh I did use that. He said at least this would tell you that you are using continuous water, and you are not supposed to be and so you can set an alarm that says you are using continuous water and should not be and so you go out in the yard and realize you left the water hose on, and you take care of it yourself. Councilman Davis said he had a leaking toilet, but he fixed it, and it should have fixed the problem. Mr. Nobles said it should be able to tell you how much that leaky toilet uses, but people do not realize how much water goes through a leaking toilet, and it is a significant amount of water. Councilman Rossow asked if there was a break on the City side, would it register it as one? Mr. Nobles said no, it has to go through the meter. Councilman Rossow asked if the meters are waterproof? Mr. Nobles said they are designed to be in a pit and so are the radios and they are all potted and sealed and everything is designed to be in a flooded environment. Mayor Cain said once the company comes in and replaces all the meters and gets everything activated, and you go on to the next City and everybody is happy and asked when someone comes up who wants to build 20 houses over here on some property where there is no infrastructure is this something the City will be able to install for future growth? Mr. Nobles said absolutely, and they will train the field guys to basically make sure that they know how to install the meter and work on it and troubleshoot it and do all that, and they are welcome to join the crews when they are doing the transition, but they will also have a one year workmanship warranty on everything as part of that and then that same example with the 20 and if it is within the coverage of those two gateways all they have to do is go put the meter in the ground and basically swipe it with a magnet that activates, sends a signal up, staff on the inside customer service will input the data and that meters reading, and you do not have to do anything else. He said if it is outside the coverage and way out for that, you would just basically buy a cellular and do the same thing and activate it, and it is done. Mr. Petty said on the cellular endpoints, people will say they got a new meter out right and they go out there and take a look at it and they pull the lid up and look at it and put it down and then all of a sudden you have a piece of wire hanging out then they cut it with the weed eater and he has seen that happen numerous of times on those cellular endpoints. Mr. Petty asked what kind of warranty is associated with that or is that a cost that the City has to replace those at that point? Mr. Nobles said they try to install them that when you do open it up that you actually have it coiled and properly underneath there but Mr. Petty is right sometimes people do not let it sit and they leave it out but they will immediately get a notice when the wires cut and it sends an alarm that the wires were cut. He said if it is proof that it has actually been cut it is not a warranty item and would be City response. Mr. Petty said he knows about six years ago they started coming out with a repair kit for them so now you have a repair kit for them. Mr. Nobles said it would be a splice kit but it would have a gel cap on the end to strip it back and basically repair it but that would be something the City staff would be able to fix. Councilman Matamoros said Mr. Nobles had stated he was going to replace the lids with polymer lids for residential and asked if those are drive proof because there is residents who have concreted around that is within a driveway and so if a car drives over it, and it is polymer it will kind of fail over time especially with the weather and the heat and so are those dry proof? Mr. Nobles said yes, they make traffic rated polymer lids and so anything that is in a driveway will be replaced with traffic rated polymer lid. Councilman Matamoros asked if this was for residential and not commercial? Mr. Nobles said yes correct, and they make them in all different sizes. Councilman Matamoros asked if the current water meter and residential is sitting ground level, will it install stay flush with the ground with this new lid or is it going to be raised? Mr. Nobles said the profile of these meters is lower than most of the profiles that the meters that are currently being used, and so they would put

the meter box back where it is today or try to get it down to level, and so if they had to physically have to replace the box, which means they are digging the box up and put it back they are going to try to flush with grade ground level, and it is probably not going to be leveled because of the ground but will try to make it grade level. Mr. Nobles said if, for some reason, the meter and that is assuming everything will fit inside the box, and it should because there is usually enough room to do that, but if for some reason, the service lines are super high and that is why the box is actually sitting above water, then they will go as low as they possibly can on that box and then put it back because they are not going to move the service line it would have to be dug out. Mr. Nobles said it would be at existing conditions or better it is typically where it is. Councilman Matamoros said he was just looking at some of the pictures where there are some that are elevated. Mr. Nobles said he would do his best to set those lower, but knowing that there are up like that, it is probably because that service line is probably not deep. Councilman Matamoros asked Mr. Nobles when he is putting in a new meter will he not touch the shutoff valve that is normally there and will leave as is? Mr. Nobles said he has to use the shut-off valve to turn the water off to replace it and if they break it he is responsible for it and, if not, it closes it, holds, change out the meter, close it, and open it back and move on. Councilman Matamoros said the reason he is asking these questions is leading to some residents who may not be able to look on a digital platform so the only way is to actually read it from the meter, and so he is thinking they may shut it off to see what it stops at and turn it on and see if they have a leak and things like that. Councilman Matamoros said he is just thinking of those residents who will not be able to access it. Mr. Nobles said the City should have a shut-off valve on every meter for that and those are staying the same and not taking them out or anything like that but if they do not hold, it will be replaced. Councilman Matamoros said talking about the customer portal and asked if it is for both IOS and Android? Mr. Nobles said it is a bring our own device model and so it will work and adjust accordingly. Mr. Nobles said he does not think it is an actual app and believes it is a website that goes through it because websites are usually easier to keep up with than apps. He said apps always have to have updates to them but thinks this is done through a website. Councilman Matamoros asked Mr. Nobles he had stated this was for fifteen years and that the net benefits were about \$117,000? Mr. Nobles said that it is just in this cash flow and knows Ms. Cathy has been working with some financial folks to try to figure it out and, obviously if she beats this rate it gets better, but this is just a draft cash flow financed out over it, and he is using a tax exempt lease over a 15-year period and how it is financed is up to the City. Mr. Nobles said the life cycle that the financial folks want to know is what the life cycle is of these meters and the legislation allows you to go 20 years and banks are okay even funding these things up to 20 years because it has a 20-year warranty on them.

Manning Rollerson said he thinks it is a great thing because his electricity bill is like that. He said he could go to his portal to see how much usage he used on his telephone. He said he thinks it is a good thing because the meters. He said he would not be there if he had not been called to go there. Mr. Rollerson said by listening to this and getting an understanding, this is something Freeport has been needing because the old meters are old. He said at the apartment complex, the Magnolias and they went and removed all the water meters because the water bill was running \$50,000 a month and so they removed all those water meters, and they put in new water meters and are still getting bad accurate readings, and so he thinks it is better that they go to the new meters. Mr. Rollerson said his concern was if there would be the loss of jobs? Mr. Rollerson said, because now they are going to something that could be read at City Hall. He asked if this would cause anybody to lose their job? He said what they are trying to do is bring jobs and more employment for a better City workforce. He asked if this would cause to lose more employees because there is a lot that needs to be done? He said this is his main thing with this, but other than that, it makes more sense to him because you would be able to see how much you spend. He said he can say he only used 3,000 gallons of water and there is his cut-off right there because he is on a fixed income, and he thinks it is great thing. He said you could choose how much water you can spend.

Mayor Cain said normally, in a Council meeting there are no replies, but this is not a Council meeting but a workshop. City Manager Lance Petty said no, it would not cost anyone their positions with the City, but become more efficient by going this route. Mr. Petty said currently right now they are reading meters four to

five days a week and then doing rereads as well and if it rains it takes longer. He said, so then they get behind on fixing water leaks and things like that, so it really makes the operations more efficient, but it would not cost anyone their positions in the City. Mr. Petty said he wanted to bring this in a workshop fashion just to go through everything and let Mr. Nobles do his presentation, so the Council could ask all the questions and everything like that and then bring it back to a Council meeting in the near future to see if the Council would like to move forward with it and make the recommendation at that time. He said this is just an education deal tonight just to get it out there, so everybody is aware of what is going on and what it looks like on paper.

Manning Rollerson said his concern was how long it would take the Council to come back and get this program started? He said it was because it needed to be started like yesterday. He said the City is losing money and looking at the net gain of \$117,000, this City needs every dollar it can get and should be backing this program. Mayor Cain said he agrees with Mr. Rollerson.

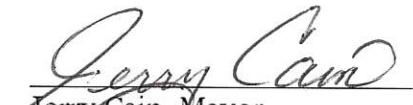
City Manager Lance Petty said he will bring this to the next Council meeting to answer any questions and will be there for the Council to vote on that also.

Mayor Cain thanked Mr. Nobles for all his work and for the excellent presentation. Mayor Cain asked if the presentation could be put on the City website? City Manager Lance Petty said yes, he had a copy of the presentation and Mr. Cohen can upload it to the website. Mayor Cain said that way, those at home or those that did not know about the meeting can look at it in the coming days. Mayor Cain said whatever information that can be put out there he would like to have it put on the website.

Adjournment

Adjournment – Jerry Cain, Mayor

Mayor Cain adjourned the meeting at 7:58P.M.


Jerry Cain, Mayor


Clarisa Fernandez, City Secretary