

**FINAL MINUTES**

**FLOOD CONTROL BOARD  
CORTE MADERA TOWN HALL COUNCIL CHAMBERS**

**NOVEMBER 17, 2010**

Boardmembers Robert Bundy, Chair  
Present: Bill Carlson  
Vaso Medigovich  
Barry Trailer

Boardmembers Stephanie Bennett  
Absent:

Staff Present: Superintendent of Public Works Kevin Kramer

1. Call to Order

Chair Bundy opened the meeting at 7:35 p.m.

2. Open Forum for Public Expression

There were no comments.

3. Approval of Meeting Minutes (September 13, 2010)

M/s, Trailer-Medigovich and carried unanimously to approve the minutes of September 13, 2010 as submitted.

4. Old Business

A. Discussion of Marquart Lagoon Pump Station site visit

Chair Bundy stated several of Boardmembers went on a site visit to the Marquart Lagoon Pump Station and he thought it was very instructive. Public Works Superintendent Kramer was very helpful in explaining the function of the pump station and how it works in relationship to the High Canal Pump Station. Boardmember Carlson stated he would like to get a tour of all the pump stations and other facilities. Public Works Superintendent Kramer stated Boardmember Carlson should contact Administrative Assistant Dale Hurst at the Public Works Department to schedule a tour.

Boardmember Trailer agreed that the tour was very instructive. He stated the budgeted amount for this project was \$175,000 and he thought the consensus was that the funds could be better spent on another project. Boardmember Medigovich agreed and stated they should pursue Public Works Superintendent Kramer's idea of lowering the pipe. He thought the adjacent neighbors would approve of trenching in that area. Public Works Superintendent Kramer agreed. He noted it would improve the water quality and enable them to keep the level of the water higher for a longer period of time.

Chair Bundy stated the Board had decided at the last meeting to move this project down as a priority and the site visit conformed this decision. They can always review their options if necessary.

B. Upgrade on Golden Hind Storm Drain Pump Station & Improvements Project (09-001)

Public Works Superintendent Kramer presented the staff report. He stated the contract was awarded to Bay Pacific Pipelines. Chair Bundy asked if they were the low bid. Public Works Superintendent Kramer stated "yes". He has not worked with the firm but plans to meet with them soon. He, along with Public

Works Director Ring, met with Control Systems West regarding the possibility of telemetry and remote control of the station from a desktop at the Public Works Department or the Corporation Yard. The cost would be an extra \$60,000 with an additional cost of \$12,000 for a complimentary system. He thought they should plan/build for this capability and possible install the system at a later date. Public Works Director Ring and Town Manager Bracken are looking into this. The radio signal would necessitate an antennae and there is concern that residents might reject this idea. The alternative is to have two cell phones that would cost about \$200 a piece per month. He is waiting for Control Systems West to get back to him with some costs. He would like to have the communications system because of reduced staffing (down from eleven to seven). Creating a system that can be controlled from a central location reduces the urgency of a response. They could also choose to go with a camera system that would allow them to look at the water level.

Boardmember Carlson asked if this system has been successful in other communities. Public Works Superintendent Kramer stated there are other cities that have this system in place and he would get some feedback. The system has been around for a few years. Boardmember Medigovich asked if it would replace the telephones on the other stations. Public Works Superintendent Kramer "yes" as the other stations were upgraded. The main signal would be at the first station. Boardmember Medigovich asked if the new station could be added into the existing phone system. Public Works Superintendent Kramer stated "yes" but they are talking about controlling the station from a remote area and they would be using their own software program. They would eliminate the existing phone system if they went with the telemetry system. Dial up systems would be less expensive but not as reliable as cell phones. Boardmember Trailer asked for clarification on the costs for the cell phones. Public Works Superintendent Kramer stated if they installed the telemetry system (remote control) at Golden Hind then they would have to have radio or telephone communication. His laptop would "talk" to the cell phone at the station and tell it what to do. They would get a bill from AT&T or Verizon and the cost entails more than just a cell phone because they would be sending data through the computer. They could control the station via the cell phone for an additional cost but he would use his laptop. Chair Bundy asked if the antennae could be installed on an existing pole. Public Works Superintendent Kramer stated Control Systems West had talked about putting it on the control panel on top of the box. It has to be high enough to bounce a signal around. He thought it would be bigger than a 4' mast. He acknowledged that residents might be opposed. Chair Bundy asked where the box would be located. Public Works Superintendent Kramer stated it would be on top of the control panel which would be placed in the easement that goes between the two houses across from the parking lot of the school. Chair Bundy asked if would be in the median strip. Public Works Superintendent Kramer stated "no" and added it would be on the walkway about 15' east of the sidewalk. The panel would be about 7' high, about 5' wide, and about 24" thick. These are rough numbers. Boardmember Medigovich asked if there was a telephone pole nearby. Public Works Superintendent Kramer stated "yes". Chair Bundy asked if the next pump that went in would need an antennae of the same size. Public Works Superintendent Kramer stated he was not sure if it would need to be the same size but it would have to be able to pick up the signal. Chair Bundy stated the other potential locations might not be as problematic. Public Works Superintendent Kramer agreed.

Boardmember Trailer stated he understood the advantage of handling this from the desktop but there would be labor associated with the maintenance of the antennae, computers, etc. He wondered how often the crew is called out on an alarm and thought the costs could be a wash. Public Works Superintendent Kramer agreed and stated they might want to continue things the way they currently exist. There are advantages to the new system but he acknowledged it was expensive. Boardmember Trailer pointed out that they continue to improve the entire storm/flood drainage system. Boardmember Medigovich asked how often the crew responds to an alarm. Public Works Superintendent Kramer stated they get more alarms in the Golden Hind Passage area due to the high tides but they are able to anticipate potential problems. They get more alarms in the beginning of the rainy season because of all the leaves, needles, etc. that have dropped into the water. Things slow down as the winter progresses and there is no longer any foliage dropping on the ground. The high tides start up in February and the crew turns their attention to the east side of Town.

Mr. Harry Schriebman had questions about the mechanism of the alarm. Public Works Superintendent Kramer stated it was an electrical transducer which has a diaphragm that measures the pressure of the water. Mr. Schriebman asked if it floated. Public Works Superintendent Kramer stated "yes" and noted it hangs straight down into the water. Mr. Schriebman stated ten years ago he was given \$10,000 by the

Town Council to put in a radio system from all the schools to the Fire Department. The antennae is the most important component. He noted residents might be leery of an antennae near his or her house. FCC regulations state that health factors could not be used as a means of stopping the installation of an antennae. He asked where the information would be accessed and noted they would not get reception up in the hills. Public Works Superintendent Kramer stated the server would be located in the Engineering Office or the Corporation Yard. Mr. Schriebman asked if the work on the Golden Hind Storm Drain Pump Station Project would begin next year. Public Works Superintendent Kramer stated "yes". There is a pre-design and construction meeting scheduled for the week after Thanksgiving.

Chair Bundy stated if this project is as successful as they anticipate then it would work very well in pumping out the rainwater that builds up during high tides.

## 5. New Business

### A. Flood Control Preparations for Winter Season of 2010/2011

Public Works Superintendent Kramer presented the staff report. Chair Bundy asked Public Works Superintendent Kramer to hit the high points.

Public Works Superintendent Kramer referred to the bottom of page 2 of the staff report and noted he added a list of the minor flood control projects (other than Capital Projects) that occur throughout the year. The cost of all the work was approximately \$350,000. Everything that was done replaced or repaired something that already existed. Chair Bundy asked about the difference between the C900 and the HDPE. Public Works Superintendent Kramer stated the C900 was corrugated on the inside and the HDPE was welded together. The C900 has a gasket. The HDPE would probably last longer. Boardmember Trailer referred to bullet #3, 300 block of Montecito, and asked for clarification. Public Works Superintendent Kramer stated contractors are often unsuccessful in abandoning storm drain lines because they usually pour concrete over them hoping it would seal. There was a sink hole on Montecito that included an abandoned line that had walls poured for the inlet but no floor. The water started coming through the abandoned line. They poured concrete along the second section, poured a catch basin where the sinkhole was, and extended it to another drain line. Boardmember Medigovich asked if HDPE was used by Pacific Trenching for the sewers. Public Works Superintendent Kramer stated "yes".

Public Works Superintendent Kramer referred to the bottom of page 3 and noted they reduced the number of sand bags since they usually end up throwing away about 1,700. They usually provide 2,000 on the west side of Town and 2,000 on the east side of Town but he has reduced this number to 1,000 for each side of town. Chair Bundy asked if this was separate from the piles of sand that are provided. Public Works Superintendent Kramer stated "yes". Chair Bundy stated this should probably be the primary responsibility of residents as opposed to the Public Works Department. He supported limiting the Public Works Department's involvement in having bags for residents. He stated the plastic bags last longer than the burlap and can be re-used. Chair Bundy supported reducing the number of bags to 500 and asked staff to keep track of how many are used. Boardmember Trailer agreed and stated the empty plastic bags could be stored more easily. Chair Bundy asked the Board if they would support his suggestion to reduce the number of bags made available for the public. Boardmember Medigovich stated he always thought the bags were for the department's use. Boardmember Carlson asked if flood insurance would cover the cost of the bags. Public Works Superintendent Kramer stated he was not sure. Boardmember Trailer stated reducing the number was a good idea since they throw a lot away at the end of the year. The other Boardmembers agreed.

Public Works Superintendent Kramer referred to page 4, Flood Control Stations, Shorebird Marsh, and stated when it was completed in 1984 the contractor failed to realize that it might be a good idea to have a roof on the structure to cover the control panels. The existing roof has settled and the gutter is resting on the perimeter fence. The angle iron supports for the piers have twisted from wind and settlement. He noted page 6 shows how much the levee has settled in relation to the station. Boardmember Medigovich stated it has settled about 2 ½ feet. Public Works Superintendent Kramer stated replacement of the roof would be expensive and not an easy task. Boardmember Medigovich asked if they could jack it up and brace it from underneath. Public Works Superintendent Kramer stated that was what they tried to do twelve years ago.

They could jack up each corner and put in something other than angle reinforced sheet steel. He noted the piers were sinking at different rates. He stated this is something that would need to be addressed in the future (remove it, replace it, etc.). Chair Bundy asked if they could ask for some bids for a new wood, composition shingle roof. Public Works Superintendent Kramer stated "yes". Boardmember Trailer asked if there were any vital components under the roof. Public Works Superintendent Kramer stated the controller and the engine were under the roof. He stated he could take the Board out to the site for further investigation. Public Works Superintendent Kramer stated the Board should also see the settlement of the levee.

Public Works Superintendent Kramer referred to page 7 and stated it shows some of the damage that was done by the original design of the San Clemente Pump Station. He briefly discussed some of the repairs and improvements that were made. Boardmember Medigovich asked if the original doors were steel. Public Works Superintendent Kramer stated "yes" and noted the new ones cost \$12,000. Boardmember Trailer asked if they looked at other door materials such as fiberglass. Public Works Superintendent Kramer stated they looked at a plastic composite but they did not come in the right size- these are oversized doors. He liked the idea of steel doors. He referred to page 10 and 11 which showed the replacement manifold. There were two factors that contributed to the decline of the manifold: 1) the original manifold did not have phalanges- it was welded on site and this damaged the interior coating; 2) the contractor put a big rock under the right-hand side of the manifold at a 45 degree angle to shore it up in order to get the phalange on and they did not remove the rock- after 23 years of vibration it wore a hole through the manifold. This is where the first leak occurred which created a sinkhole. He stated that cathodic protection only applies to the outside of the pipe and the only thing that protects the interior of the pipe is the coating. They ended up paying about \$80,000 for the manifold with the coating and the certification/inspection. It should last about 50 to 60 years. Boardmember Medigovich asked if the replacement manifold had cathodic protection. Public Works Superintendent Kramer stated "yes". Boardmember Medigovich asked if the concrete had to be protected. Public Works Superintendent Kramer stated "no". Chair Bundy stated the Board had raised an issue pertained to the cost of inspections and whether or not the Town was buying more "insurance" than it needed. Boardmember Medigovich stated he thought the cost for the project was around \$200,000. Public Works Superintendent Kramer stated the manifold itself was around \$90,000 but the installation cost about \$110,000. They then had to repave the street and put in new landscaping. Chair Bundy asked if the cost of the inspection was \$40,000. Public Works Superintendent Kramer stated it was \$16,310. Chair Bundy stated that was much more reasonable. Boardmember Carlson asked if this could happen at any of the other pump stations. Public Works Superintendent Kramer stated "yes". Boardmember Medigovich stated the damage would not be as serious since this was the biggest manifold.

Public Works Superintendent Kramer briefly discussed gate maintenance. He reported there was a leak from the discharge manifold at High Canal. They are not sure if it is Bay water coming from the Corte Madera Creek side or if it is a hole in the discharge line that is coming along the margin. There are four tubes (three 60" and one 48") that run from the High Canal north into Corte Madera Creek. These tubes used to have gates. When the pump station was built they took the easternmost pipe and dedicated it as the discharge line for the pumps. They connected a manifold on the High Canal side that runs to the four pumps. During recent gate maintenance they noticed pinhole leaks coming from the securing plate. They are going to wait until the spring to make a decision on what to do. In the meantime, they drilled some new holes, put in some bigger bolts, and filled it with grout. It is no longer leaking. He stated there is also a leak in the levee on the west end (at the end of the headwall). This is something that could only be seen during the maintenance period. They will make a decision about this in the spring. He noted they put sheet piles in this area about three years ago. Boardmember Medigovich asked if the sheet piles were still holding. Public Works Superintendent Kramer stated "yes". He stated they had two of the submersible pumps rebuilt at the High Canal. They are flight pumps made in Sweden. They got them back three weeks ago and the cost was around \$50,000. One of the rebuilt pumps was defective and they hope to get it back in the next couple of weeks. They are currently down one pump in that location.

Chair Bundy asked what is done with the material that is excavated from the wet wells. Public Works Superintendent Kramer stated it was considered hazardous material and must be handled as such. There could be some petroleum products in it. Chair Bundy asked if it would be possible for the Town to add this to a compost pile. Public Works Superintendent Kramer stated the Regional Water Quality Control Board

would prohibit this since it must be tested. Chair Bundy would like to see all communities try to become more “green” from the standpoint of not putting things in the dumps. Public Works Superintendent Kramer stated he would get more information.

Boardmember Medigovich had a question about the repairs done to the outfalls along the High Canal. Public Works Superintendent Kramer stated they slip-lined three of them. Boardmember Medigovich asked if there was a new one. Public Works Superintendent Kramer stated there were two on the east side and one on the west side. Boardmember Medigovich asked about the new pipe south of the bridge. Public Works Superintendent Kramer stated that pipe is abandoned but it still weeps water out from the back yards. They slip-lined it with plastic because it was cracked. They put the gate on today. The 18” gates cost \$700 and the 15” cost \$439- a steel gate would cost about \$4,000. Boardmember Medigovich asked about the gate on the east side of Birch. Public Works Superintendent Kramer stated that was a stainless steel gate. Cast iron is very expensive, heavy, and does not really work because it gets very brittle. The heavy gates can contribute to the degradation of the pipes. Boardmember Medigovich stated the gate near Sandpiper Circle (across from the Lagoon Two Pump Station) has collapsed. Public Works Superintendent Kramer wondered if that belonged to the Marin Municipal Water District. He would take a look at it. Boardmember Medigovich asked if CalTrans had cleaned out the gate near Conow Street where it goes across under the freeway. Public Works Superintendent Kramer stated he did not think so but added it does not get that dirty. He stated they had an issue with the aluminum gate near Robin Drive. The tides have been pretty dramatic due to the dredging out near Greenbrae. He was concerned because at one point all they could see was the top of the headwall and there was a huge increase in the amount of sediment. They built a little breakwater out of riprap in front of it. They will keep an eye on it. Chair Bundy asked if there was a flap gate on it. Public Works Superintendent Kramer stated “yes”.

Chair Bundy asked the Board to take a field trip to the Shorebird Marsh Pump Station and take a look at the levee and the roof structure. Boardmember Trailer stated the station was fenced off. Public Works Superintendent Kramer stated he could meet them and unlock the gate.

The Board thanked Public Works Superintendent Kramer for his update and great work.

## 6. Adjournment

The meeting was adjourned at 9:30 p.m.