

TIMPANOGOS SPECIAL SERVICE DISTRICT
ADMINISTRATIVE BOARD MEETING MINUTES

APPROVED

October 18, 2018 6:00 p.m. Conference Room

Board Members

Present:

David Bunker	Jay Meacham	Sullivan Love
Lynn Walker	Blaine Thomas	Mark Christensen (phone)
Brian Braithwaite	Mack Straw	Chandler Goodwin

Excused:

Commissioner Bill Lee	Dale Ihrke	Chris Condie
Craig White		

District Staff:

Richard Mickelsen, District Manager
David Barlow, District Engineer
Shannon Hansen, Human Resource/Administrative Assistant
Danette Smith, Board Secretary

Others:

Craig Carlile, Ray Quinney and Nebeker
Brandon Wyatt, Bowen Collins & Associates
Brandon Heidelberg, Brown & Caldwell
Randal Zollinger, Jacobs

Call to Order

David Bunker, Board Chair, called the meeting to order. 6:03 p.m.

Public Comment

There was no public comment.

Approval of Minutes

1. Approval of the September 20, 2018 Administrative Board Meeting Minutes

Brian Braithwaite made a motion to approve the minutes from the September 20, 2018 Administrative Board Meeting. Lynn Walker seconded the motion. Those voting "Aye" – David Bunker, Mack Straw, Mark Christensen, Brian Braithwaite, Blaine Thomas, Lynn Walker, Chandler Goodwin, Jay Meacham, and Sullivan Love. The motion passed unanimously.

Consent Calendar

There were no items on the consent calendar.

Finance

1. Financial Report

Joe Martin was excused for Board Meeting. Rich said Joe did not receive any questions or comments. There is not any additional information, just the August financial report. David Bunker said the impact fee report it looks good, everyone is up to date on remitting their fees.

1 **Action Items**

2 **1. Tentatively Adopt the 2018 Tentative Amended Operations and Maintenance & 2018 Tentative**
3 **Amended Capital Budgets**

4 Rich said he went through each of the capital projects budgeted for 2018 and put amendments where needed. The
5 Power Quality (Switchgear Generator) \$800,000 was pushed to 2019. If we were not going to take any action on
6 items in 2018, we moved them straight over to 2019. The 2018 Collection Shop and Drainage, we will spend
7 \$20,000 by the end of the year and push the remaining \$130,000 into 2019. The Upgrade City Flow Meters line had
8 a typo. The study was approved by the board for just over \$18,000, so that should be \$20,000 instead of \$200,000.
9 The IPS Retrofit, at \$1.5M was pushed that out to 2020 instead of being spent in 2018 or 2019. We need to finish the
10 Boat Harbor, and the IPS Optimization before we actually look at the IPS Retrofit. In Blower Replacement, we
11 budgeted \$4 million for the 2018 budget, Rich recommended we go to \$350,000 this year. We have already spent
12 \$210,000 on the design and are estimating it is going to be another \$150,000 to complete through the end of the year.
13 Brown and Caldwell came back with an estimation on the completion of the project, including construction, at
14 \$10.4M. Rich said he put \$10,050,000 in the 2019 budget. Rich subtracted \$350,000 from the \$10.4 million
15 thinking it was included in that, but it is not. Their design is separate from their estimation for the completion of
16 construction and blower costs. We have not opened the blower bids and are waiting for the state to let us know if we
17 meet the qualifications for design for the facility. Rich said there is the chance that we will not spend all that money
18 because the state may say the design needs to be back up to the full capacity.

19 Rich said in the HVAC Evaluation Plant Wide we have spent \$6,725 and would like to push the remainder of that
20 money over to the 2019 budget. There are two line items for the Boat Harbor LS Optimization. We need to push
21 that money to 2019, as we are not sure if the problem is a pump or electrical power issue. We want to solve that
22 before we go out for an RFP. The second line should be for the Grinder. We spent \$89,885.00 for a grinder to
23 replace the one that was burned. That was paid out by the insurance, but we did not have a line item to show the
24 grinder we purchased. Rich said staff has been hesitant to spend money on fleet. Rich placed an order for a
25 pretreatment truck, which was right around \$45,000. Rich does not think that will come in this year, so he moved
26 all that money over to the 2019 Fleet, contingent upon the truck not coming in this year. David Bunker said we had
27 \$850,00 budgeted and Rich is proposing to move all of that over to 2019 budget, so the amended would go to \$0.
28 David Bunker said in 2018 there was \$100,000 in New Equipment, and asked what new equipment is \$2 million in
29 2019 proposed. Rich said that is for biosolids handling. Rich said we are going to have to start transitioning wasting
30 and hauling to the landfill. Roger at North Pointe, has told us they cannot haul all the solids we are sending them.
31 Roger has said that on Friday afternoons we can no longer take biosolids over to North Pointe. Rich said the problem
32 is they do not get enough garbage on Friday because of the way they mix it with our solids. We will have to drive
33 out to Bay View on Fridays. Rich said the \$2 million in new equipment is to purchase a new press. We need a new
34 press because we cannot compost on weekends anymore, and North Pointe does not take on the weekends. We will
35 have to hold more solids Monday through Friday and press more those days. We are pressing about 82 tons/day we
36 will have to press 115 tons/day Monday – Friday. We will have to use all four presses we have and will need at least
37 one back up unless they go down or need maintenance. One press costs \$921,000, that does not include the sludge
38 pump, the polymer distribution system or connecting the press. Rich said he ballparked it at \$2 million. We have
39 only spent \$10,000 of the \$100,000 allocated for 2018, so there may be \$90,000 rolled over. The Remove Lehi
40 Flume on Boat Harbor Project was approved at the last meeting and was higher than originally expected, we need to
41 increase it \$206,000 to make it \$331,000 in order for to cover the approved contract.

42 David Bunker said in the O & M Budget, it looks like we are forecasting revenues to remain the same for 2019.
43 Rich said that is correct. David said in the operating expense there is an increase in Solid Waste Disposal and
44 Chemicals and Supplies. That is probably because you are anticipating what we are sending to North Point. Rich
45 said yes, solids disposal was increased to \$825,000 because there will be an increase in the amount of solids due to
46 chemical removal of phosphorus. Rich said he is looking at processing 800 tons of solids for composting next year
47 and anticipated about 600 tons for composting in 2020. That would get us in compliance with the lawsuit settlement.
48 Rich said he projected out the green waste and believes we will have all the green waste we need by April or May
49 2020 to process for the rest of the year. We will look at that when we get closer, but the cities need to be aware of
50 that timeline. The chemicals were increased 2.7%, as he mentioned in the retreat if we add Ferric, we can get the

1 phosphorus down to the 1 mg/L. He thought he had pulled out the \$700,000 he anticipated if we went to chemical
2 addition, we are not set up for that right now, so he will pull that out. Rich said he may have added some chemicals
3 to do a chemical study for a week. Rich said he knows it works, he wants to prove it works on the large scale.
4

5 **Brian Braithwaite made a motion to Tentatively adopt the 2018 Tentative Amended Operations and**
6 **Maintenance and the 2018 Tentative Amended Capital Budgets. Blaine Thomas seconded the motion. Those**
7 **voting “Aye” – David Bunker, Mack Straw, Mark Christensen, Brian Braithwaite, Blaine Thomas, Lynn**
8 **Walker, Chandler Goodwin, Jay Meacham, and Sullivan Love. The motion passed unanimously.**
9

10 **2. Tentatively Adopt the 2019 Tentative Proposed Operations and Maintenance & 2019 Tentative**
11 **Proposed Capital Budgets**
12

13 **Brian Braithwaite made a motion to Tentatively adopt the 2019 Tentative Proposed Operations and**
14 **Maintenance & 2019 Tentative Proposed Capital Budgets. Sullivan Love seconded the motion. Those voting**
15 **“Aye” – David Bunker, Mack Straw, Mark Christensen, Brian Braithwaite, Blaine Thomas, Lynn Walker,**
16 **Chandler Goodwin, Jay Meacham, and Sullivan Love. The motion passed unanimously.**
17

18 **3. Set the Public Hearing date for the 2018 Tentative Amended Operations and Maintenance and 2018**
19 **Tentative Amended Capital Budgets and the 2019 Tentative Proposed Operations and Maintenance and**
20 **2019 Tentative Proposed Capital Budgets. Suggested date for the Public Hearing is November 15, 2018**
21

22 **Chandler Goodwin made a motion to set the Public Hearing for November 15, 2018 for the 2018 Tentative**
23 **Amended Operations and Maintenance and 2018 Tentative Amended Capital Budgets and the 2019 Tentative**
24 **Proposed Operations and Maintenance and 2019 Tentative Proposed Capital Budgets. Sullivan Love**
25 **seconded the motion. Those voting “Aye” – David Bunker, Mack Straw, Mark Christensen, Brian**
26 **Braithwaite, Blaine Thomas, Lynn Walker, Chandler Goodwin, Jay Meacham, and Sullivan Love. The**
27 **motion passed unanimously.**
28

29 **Communication**

30 **1. Quarterly Engineering Update – David Barlow**

31 David Barlow said they received another SOQ yesterday that will go to the Engineering Committee when they
32 meet. The Headworks Improvements and Collections Shop Drainage Projects are about 50% designed. Due to
33 weather we are going to bid that the first of the year. The Flow Meter Study is under way. They have inspected all
34 of the flow meters, looked at our billing procedures, and the report should be finalized by the end of the year. All of
35 the work on the Electrical Safety and Compliance Project has been done and they have given us a draft of the report.
36 That project will also be done by the end of the year. The Blower Replacement Project, is about 50% done on design
37 and we are waiting from DWQ on the air requirement. The Biosolids Study is expected to be done by the end of the
38 year. The Westside Interceptor Cleaning and Lehi Flume Removal is under way. It was a 90-day contract and they
39 are expected to finish that in just over 30 days. The RFP for the CFP, IFFP is written and we just need to put the
40 dates in and send that out. That will be sent out to the approved consultants on the SOQ list probably next week.
41 David Bunker asked if we would want any other consultants to help us on the IFFP that aren't on the SOQ list.
42 David Barlow said we can look into that, he thinks all of them that are qualified to do the CFP could do the IFFP as
43 well. David Barlow said once the IFFP is done, then we would have to get a financial consultant on board to do the
44 IFA and Rate Study. There are several projects we are doing in-house, those are listed. At the start of the year we
45 approved a budget of \$50,000 for project management and to date we have spent just over \$25,000.
46

47 **2. Biosolids Management Study- Executive Summary Brown and Caldwell**

48 Brandon Heidelberger, Brown and Caldwell, said they are nearing the end of the biosolids evaluation and were
49 asked to prepare an executive summary. There have been some great comments and input from staff. Brandon said
50 they have submitted several technical memorandums, which dealt with short term solutions and could be

1 implemented prior to 2020. The long-term solutions require additional capital to execute. Brandon said it looks like
2 landfilling is the most appealing short-term solution. Obviously, there are some logistical issues that need to be
3 worked out. Brandon said long term there are a lot more options available. The last update offered two different
4 paths available and what alternatives were available based on what those scenarios looked at. One scenario was to
5 maintain existing liquid treatment process. The other path was looking at other liquid options as far as primary
6 clarifiers, and anaerobic digestion which opens additional solutions for long term disposal of biosolids. One of the
7 comments they received was wanting to see a more apples to apples comparison of some of those long-term
8 solutions. Brandon said for that they looked at some of the beneficial reuse options that were available with some of
9 those long-term solutions. Some of the obvious reuse options that came in like cogeneration that could potentially
10 offset some of the costs for imported power. Brandon said scenario one options are summarized in the executive
11 summary. They consisted of relocating and upgrading the compost operations, which would mean moving
12 composting offsite. Brandon said they also looked at upgrading the existing aerobic digesters in addition to
13 landfilling. Another alternative was a thermal drying option to meet Class A standards. Scenario two options are
14 those that would include an anaerobic digestion of some means to address the solids. Those options would entail
15 primary clarifiers and some form of anaerobic digestion.

16 There was an updated cost analysis, to compare apples to apples comparison and looked at life cycle costs 10 and
17 30 years out. Brandon said with scenario one, offsite composting had a relatively low cost associated with it and
18 costs were pretty similar to upgrading the aerobic digesters. Brandon said with scenario two, anaerobic digestion
19 with land application had the lowest overall life cycle costs (excluding direct landfilling). Direct landfilling is always
20 going to be the least cost alternative but does not provide a beneficial reuse, which is one of the goals and you are
21 locked in to a landfill operation that may or may not be allowable in the future. Brian asked if there was any
22 assumption with the year-round landfill that the cost would be going up over time. Brandon said escalation was
23 included all the costs they looked at.

24 Brandon said this is a very broad look at what your options are, and the overall recommendation is that some of
25 these beneficial use options should be kept in play. Based on this analysis and looking at long range forecasts, some
26 option that provides a beneficial reuse that could potentially offset cost here should be considered along with the next
27 upgrade to the plant. David Bunker said short term obviously is landfilling. We are quickly coming up on the day
28 when we cannot compost anymore, so until we have a different long-term solution, whether that is a primary clarifier
29 or anaerobic digestion or some other option, then we are going to be landfilling.

30 Brian asked if there is any possibility we can get a longer-term commitment out of the landfill; his biggest
31 concern is they can cut us off anytime. Rich said we are paying a tipping fee of \$26.50 until the end of this year to
32 haul it to North Point. Rich said Roger at North Point is giving us a price of \$15/ton to deliver it out at Bay View.
33 Rich said the question he had with that is how much it is going to cost us to haul it out to Bay View. Rich said he put
34 in three semis and trailers with walking floors in the budget. Rich said he believes we can do it for \$12.50/ton. Rich
35 said Roger wants the price at \$15/ton locked in for three years, and then we would do CPI increases for years after
36 that. Rich said he received a contract from Roger this afternoon, which he has not read yet. Brian wondered if we
37 could get a minimum 10-year commitment and have it renewed automatically after that, under the same conditions
38 that it raises after three years, but it is a locked in contract for 10 years. Rich said he will need to look at the contract.
39 Brian said the 10-year time frame has more to do with the fact that we will be in the process of the next changes here
40 and it gives us time to get through that. Rich said his thought was to lock in for the 3 years and do that CPI increase.
41 Rich said he asked Roger how long we could haul until they are full. Roger said he has a 100-year capacity. David
42 Bunker said getting a locked in 10-year agreement could have some unintended consequences, if we have to
43 guarantee tonnage, we may want to consider something different. We need to look at that really careful. Rich said
44 Roger has asked what we are budgeting for the next year, so he can put that in his budget, Rich anticipates that Roger
45 will ask us yearly how much we are going to take out yearly.

46 Mark Christensen arrived. 6:55 p.m.

47 48 **3. Manager's Report**

49 Rich said Craig Carlile is working on the Procurement Policy. Rich said on the personnel policies, he has a
50 document that looks like there has been work done on it, but he has not completely gone through that. On the salary

1 comparison and benefit review, we have obtained the comparisons for our jobs in the TechNet service we use. Rich
2 said he will have that available for the Administrative Committee meeting in November. The IT Service RFP is
3 ready to go out, Rich will send that out soon. There were five goals from the Board Retreat: 1) fine tune the CIP
4 projects - Rich has done this with the budget process 2) staffing needs – has not been addressed yet 3) special
5 service district and local district options with decisions by June 2019 – Rich will address later 4) asset management
6 details and completion – this is part of what Rich did with the capital projects 5) meet with member cities – Rich
7 gave a presentation to Highland City as requested by Brian. Rich gave the board the presentation.

8 Blaine said people ask him what percentage we clean the water going to the lake compared to drinking water.
9 Rich said we clean it to 98%, but it is still not clean enough to drink. We are looking at ppm to get it to drinking
10 water quality. This nutrient removal we are currently trying to meet puts us nearly one step away from drinking
11 water. Rich said TSSD has no violations, and meets all requirements set forth by DWQ. Rich said they have
12 evaluated us and determined that we are doing a good enough job that they have extend us to 2023 to be fully
13 compliant on the phosphorus limit. Rich handed a packet that shows how well the plant is operating with respects to
14 how we compare to other facilities throughout the nation. We submit our information to this national organization,
15 so we are part of this survey. We are below the national average on personnel and O & M costs.

16 With Utah Lake and the algae issue in the news, Rich handed out an illustration on alternative stable states. Rich
17 said the engineering firm that put this illustration together, have found that as they remove phosphorus, it does not
18 get to clear water. You must have ecology to uptake all the other algae in the water body before you get back to that
19 clear water. In Lake Wingra, WI, and Riley Lake, MN, they had fish exclosures. The fish exclosures keep the carp
20 out but the water flows back and forth, and they have cleaned up the water by having the ecology in there. Rich said
21 he would like to put a fish exclosure at the end of our system here, so when they take satellite pictures to show how
22 bad the lake is, we can show how this works. Mark Christensen asked how long it took for the ecology to recover in
23 that exclusion zone. Rich said he did not know that. Mark said we may want to ask that and set expectations, it
24 could go bad if we didn't know that it was going to take years to restore. Rich said good point. David Bunker asked
25 if we need a permit from the state to do that exclosure. Rich said he is not sure, but he has started that process with
26 Utah Lake Steering Committee and Science Panel has this same experiment in mind, but they want to do it in Provo
27 Bay area. Rich is trying to get them to look at our site. Mark Christensen asked Rich to look into what the wave
28 movement on the lake will do to that, since there are some big waves at times. Rich said that is ok, as long as the
29 carp do not get in there. Mark said his concern is you may be getting the lake water in. Rich said they look into that
30 and they do want that. The theory is, the problem are the carp, that is why they spent so much to get the carp out of
31 there. It is a water level issue as well. The research DWQ is doing at Utah Lake may set new parameters for TSSD
32 and we may have to comply with those new changes. They are going to finish their study by 2023, then the TMDL
33 will probably be written and we will have to comply to those new rules and regulations they set forth. They have
34 signed an agreement that they will not impose any of those requirements on anybody until 2030.

35 Chandler Goodwin left. 7:15 p.m.

36 Rich said in the past we have not accepted waste from member cities' jet trucks cleaning the city lines. Rich said
37 his personal opinion is that we should accept that because they are getting grit out, so we do not have to take care of
38 that downstream. We have a location here at the plant for our trucks that go out and clean the lines. The grit is
39 hauled to the landfill and the water is treated here at the facility. Rich said he recommends that we set a price per
40 gallon for city jet trucks around 6 cents per gallon. Rich said we would restrict it to sewer line water, no storm water.
41 Rich said we have included \$125,000 for a dry polymer mixer. He asked staff about the old polymer mixer and they
42 said they have bought parts to try and make it work, it is falling apart. We have received 2 bids back for the mixer so
43 far, one for \$125,000 and one for \$132,000. North Pointe costs are up from \$26.50 to \$27.50 per ton and hauling
44 directly to Bay View is \$15/ton. To purchase three trucks and trailers it is \$750,000. To purchase a belt press is
45 \$921,000 plus installation.

46 Rich said a Master Plan was at added at \$400,000 as recommended by Dale Ihrke. We want to do a conceptual
47 design for chemical feed/backup and digester blowers at \$250,000 to get a better look at how to treat the phosphorus
48 biologically. The Power Quality project has \$800,000 for 2019, and the remaining \$1,900,00 for 2020. Rich said
49 2019 Asset Management projects that were pushed to 2020 1) The BNR Zone/Redox Control at \$1.5 million because
50 we will have our hands full with other projects that take priority 2) Relocate and Replace Dry Creek Lift Station at

1 \$2.8 million because we do not have the land acquired so Rich will begin talking with IM Flash as they have the land
2 3) The Biosolids Disposal Facility at \$2.6 million is one that might move up, if needed 4)The Structural Rehab of
3 60" line at \$2 million 5) IPS Retrofit at \$1.5 million was scheduled for this year, but we have to finish two other
4 projects before determining what to do with that.

5

6 **Closed Meeting**

7 There was no closed meeting.

8

9 **Adjourn: Blaine Thomas made a motion to adjourn. Lynn Walker seconded the motion. All present "Aye".**

10 **Meeting adjourned. 7:30 p.m.**

11