

(1) Many projects are at least partially funded from "Capital Reserves". Is there a document that shows the expected year-end balances of the different capital reserve funds, as well as how much money is anticipated to be paid into them and how much money is anticipated to be withdrawn in 2017? During the Stormwater meeting, the consultants made statements to the effect that the City doesn't have any capital reserves. I assume this was hyperbole, but it would be nice to see the actual numbers. Also, it would be helpful to differentiate between funds drawn from "capital reserves" because they were allocated in a previous year and not spent versus those taken from the "capital reserves" without having previously been designated for the same project.

The statements made by our consultants regarding the City's reserves, are not an exaggeration. The City's practice of cash financing of capital projects has severely restricted our ability to adequately fund our reserve accounts to the levels that are required per our finance policy. The annual need to reprioritize, delay and revise cost projections for our projects is generally in direct relation to the availability of the financial resources available to fund these projects.

We acknowledge that the City's practice of utilizing unspent funds in capital projects for other capital projects can be difficult to follow. We are working on some improvements to our CIP process which will make the practice more easily tracked.

(2) Presumably, the purchase of new land by the City constitutes a capital expenditure. Why are there no funds in the CIP for either 100/101 Veterans Dr. or 103 Hillside? Are these purchases not expected to happen within the next 5 years?

There is no funding in the CIP for either property as there has been no final decision regarding their purchase. Additionally, it is generally expected that the purchase of the Hillside Road property will require a Referendum. Regarding the Veterans Drive property, while Council direction for engagement with the property owner has been given, the engagement is exploratory at this time and in association with knowledge of their search for a new location/outreach. Again no decisions have been made and the property owner has not made final decisions.

(3) Do you really expect to be able to double the net capital expenditures from 2017 to 2018? Why is the City not attempting to lessen the fluctuations in the "current" funds needed for infrastructure?

In general, staff attempts to level out the CIP, but the City's high reliance on transfers from utilities to the general fund makes it difficult for departments to rely on revenues and is further complicated by pay-as-you-go financing. The incorporation of debt financing with the capital plan would result in the leveling out of the City's immediate cash needs. In addition, since funding for some of our projects are also reliant upon other funding sources (state, private, federal), our project schedule can be directly impacted by the availability of those funds.

(4) Why did the planned vehicle replacements change so much from last year's CIP? For many departments the expected expenditures went down significantly. For some divisions (e.g. Police), the 2017 expenditures decreased, but the 2017+2018 expenditures went up significantly.

We have anticipated replacement schedules for all of our equipment that is located in the sinking fund and that is how the out-years are input. As we get closer to the replacement year for each piece of equipment we re-evaluate the equipment and either pull it forward or push it further into an out year depending on the condition of the vehicle. We have replacement schedules for all of the equipment that is located in the sinking fund, and that is how the out-years pieces of equipment are incorporated into the budget. As we get closer to the replacement year for each piece of equipment, we evaluate the immediate need for replacement, and either pull it forward or push it further into an out year, depending on the condition and service history of the equipment. Prior to finalizing the decision to replace a vehicle, an additional review is performed looking for potential large scale rehabilitation options that may allow replacement of an item to be postponed. For example, we replaced the body on the street sweeper in 2011 and portions of the vacuum head in 2015, then were able to push off replacement until 2016. If rehabilitation is not cost effective, we at that time move forward with replacement.

(5) On the project-specific sheets, how is the percent completed computed? Sometimes it seems to be the proportion of the total costs already spent, but many times the stated percentage is inconsistent with the spending rate.

The “% Complete (if underway)” box is completed by each department director, with assistance from the Finance Department in some instances. New projects will be left blank, while active projects will include an estimate based on several assumptions, including but not limited to:

- Percent of funding spent vs. total authorized
- Percent of time completed on the specific project vs the estimated deadline
- Percent of widgets procured, repaired or replaced vs. the total to be procured, repaired or replaced.

All cases do not have a direct correlation between dollars spent vs. total in association with the varied work we perform.

Electric:

(1) Re. E1701: It seems the City is budgeting a fixed number each year for new lines and service. How much money was actually spent on this item each year for the last 5-10 years? How many of the 17 listed developments are expected to be completed in 2017?

Year	Expended
2015	159,631
2014	61,493
2013	127,327
2012	85,365
2011	130,945
2010	94,892
2009	73,064
2008	160,728
2007	181,983
2006	135,038
Total	1,210,466

The above detail shows the actual expended for lines and services for the last 10 years. We do budget based on past experience in order to have funding available to react to projects that we may not be aware of. This practice has served us fairly well. It is difficult to gauge when developments will be completed but we expect the Mill at White Clay, The Academy Street dorms, Astra Plaza, The Heights of South Chapel, 60 North College, 52 North Chapel and Candlewood Suites to all be completed in 2017.

(2) Re. E1203: What is this software "needed" for? It looks like it has been in the CIP for 5 years now, and it is still pushed out another year. Do we really need it, then? What happened to the "prior" funding shown in the 2016 CIP?

The engineering software will be used to model the electric distribution system. This will allow us to calculate fault currents, balance circuit loadings, calculate voltage drops, calculate relay settings, coordinate overcurrent devices among other things. These calculations are currently done manually. The software was pushed out because of priority funding and a lack of manpower to input the information into the system. The new Engineer recently hired has experience using software and will spearhead the project.

For this particular project, the funding was first approved in the 2012 CIP budget. Each year, the merits of all projects are evaluated and prioritized. At times, previous appropriations that have not been spent are maintained for the same project. At other times, those amounts may be re-directed to another project through a subsequent budgeting process. In

short, each budget adoption is based on the best recommendations resulting from the information available at the time. In this case, the funding has been maintained in the reserves for this particular project each year although the project implementation has been delayed beyond the original expectation. The “prior funding” is the capital reserves funding source shown. The year the reserve amount (or prior funding) is expected to be spent is intended to be more clear by showing it in that year’s column rather than having sums in a “Prior” column that does not demonstrate which year it is related to.

(3) Re. E1105: This project was estimated to cost \$2,146,000 in the 2016 CIP. The 2017 CIP shows that exactly this amount will have been spent by the end of 2016. Why is another \$653,000 added to the expected project cost? If this is because a new component was added, then why is this not a new project?

The \$653,000 is needed for a new transformer at the Chestnut Hill Road Substation to feed the Star Campus. The transformer installations are an ongoing infrastructure upgrade. The money was added to the existing capital project as was done for the last four transformers purchased. The Capital Program sheet explains both efforts.

(4) Re. E0503: Why has the total project cost increased by \$50,000 from the 2016 CIP estimate? In 2016, \$501,000 (including prior funding) was allocated for this project. From the spending by 12/31 boxes, I gather that only \$101,000 of this money has been spent in 2016. What happened to the other \$400,000? Why would they not be in the "prior" column under "capital reserves" instead of being part of the 2017 "current resources"?

The \$50,000 added cost is needed to connect four substations currently using radios for the SCADA communication to the City’s future fiber optic system. This will increase reliability and speed of communication. The money for the automatic switching project has not been expended. The bid package will go out shortly. It was decided earlier this year to bid the project so when awarded all funding will be in place.

Management’s recommendation is to forgo spending on that project from reserves and instead fund that cost from current resources. Essentially, the electric reserve is being maintained to allow applying it to a future need.

Water:

(1) There appear to be many inaccuracies in the descriptions/justifications, which have been insufficiently updated since 2016. Also, for many of the projects (e.g. W1501, W1402, W1304, W1104, W9302, W9308, ...), funding allocated in 2016 is not displayed on the project page, neither in the "estimated spend" field, nor in the "prior" column. This seems to be an error.

We identified several sheets where the estimated spend field was not updated, those sheets and the changes are described below. Some projects have not incurred any expenses since that field was implemented in 2014, or the project (water main and tanks) are a series of independent projects so it isn't really applicable. These project have been updated.

- W1501 updated to reflect \$50,000 spent in the estimated spend column.
- W1303 updated to reflect \$247,850 spent in the estimated spend column.
- W1304 updated to reflect \$15,000 spent in the estimated spend column.
- W1101 updated to reflect \$48,733 spent in the estimated spend column.
- W9302 updated to reflect \$95,283 spent in the estimated spend column

(2) Re. W1702: What kinds of projects would be funded with this money? At this funding level, do we really expect a measurable impact?

This funding has been allocated to show commitment to the “Brandywine Christina Healthy Water Fund” and would be used to leverage external funding as it would originate from a non-state or federal source and would therefore be eligible to be used as a match for either funding source. That said, we have already partnered with groups like Suez Water, Brandywine Conservancy, Chester County Conservation and the Brandywine Red Clay Alliance to complete several projects with funding from the City below this level. The initial focus of our source water protection efforts have been on cryptosporidium reduction which is generally accomplished through streambank fencing and manure management, both of which are fairly inexpensive when cost shared with several organizations.

(3) Re. W1703, W1601, and W1503: If we are planning on building a new treatment plant as a back-up water supply, why do we also need electric back-up? Couldn't the LTWF plant serve as back-up for the SWF plant, regardless of whether SWF is offline due to water contamination, maintenance work, or power outage? How is the need for an improved commercial interconnection (W1503) impacted by W1703?

Backup electric generation is proposed for Well 17 and the Northwest Booster. The Laird Tract wells do not have backup generation so if we have a widespread power outage they will not be able to act as a backup to SWF. The Northwest Booster pumps water to the New London Tank which provides pressure to the Fairfield, West Branch, Christianstead, and Nottingham areas. Without backup generation capability for this booster station we would only be able to last about 24-36 hours before some houses would begin to lose water and we would have to enact a boil water order. Also, both projects would be grant eligible through DEMA and we intend to apply. Initial feedback from DEMA has been very positive. We need to maintain our interconnection with neighboring utilities for backup in the event that we have a catastrophic failure in our system or if we have the Curtis WTP offline for an extended period of time. We also use this interconnection when the Paper Mill Road tank is offline due to the loss of storage. United is relocating their main as part of

the train station project and we are investigating new methods of interconnection pumping that may significantly reduce the eventual cost of the project but it is too soon to know for certain if they will be possible.

(4) Re. W1601: The memo says that \$50,000 were saved off this project. This is not reflected in the total project cost, which is unchanged from last year's CIP. Why?

We were able to repurpose a generator for Well 15 which was included in the 2016 project but we added the Northwest Booster which should have been on the 2016 sheet but was not. Without the Well 15 repurposed generator the project would be approximately \$50,000 higher in 2017 than 2016. The project sheet has been updated.

(5) Re. W1602: In 2016, \$25,000 were used to investigate the alternative solutions. So what were the results of this investigation?!? Which solution is being recommended? Why did the anticipated cost drop from \$500,000 to \$150,000? Also, if this has priority level #2 (critical), then why can we wait another 5 years to fund it?

We have identified new technology that would allow us to install a booster type that was previously thought to be cost prohibitive due to power availability. We were originally thinking to run a new main from the Possum Park Road pressure zone over to serve this area but can now instead install a booster station which will provide better pressure at much lower cost. We also believe that we will be able to perform the installation utilizing in-house forces.

The current conditions are OK from a legal standpoint but would not be allowed to be constructed today due to low pressure and minimal fire flow. All homeowners in that area are supposed to have in-house booster pumps, which is OK for an existing condition, but is also not allowable for new construction. Most houses do currently have booster pumps but they often fail and we get a lot of complaints from our customers when they have to replace theirs. Since this is an improvement in service project as opposed to critical operations we have prioritized it below more critical projects like the Curtis hypo conversion and two groundwater treatment projects. These three projects in particular will likely absorb a lot of management's available time, limiting our availability to PM this project until they are complete.

(6) Re. W1503: Why has the project total cost increased > \$98,000 from last year's estimate? Why has the est. spend decreased from \$7500 in the 2016 CIP to \$6312 in the 2017 CIP, without a corresponding reflection of left-over funds from prior (pre-2016) appropriations?

We encumbered \$7500 for the initial review but have only encumbered \$6,312. The project cost increased based on the result of the initial engineering review. There is a possibility that this project changes significantly due to work proposed by United Water (Suez) but we won't know for sure until winter/spring 2017.

There was \$42,500 budgeted in 2016, of which \$6312 was encumbered and is coming out of current resources in 2016. For 2017, we are carrying over the same \$42,500 authorization, with the intention that the balance of the \$42,500 will be expended in 2017.

(7) Re. W1402: Why has the total project cost increased by more than 50%? The description remains identical, except for the dates. And what was the result of the 2016 pilot project? Why were no funds expended for this?

The pilot study has been held up by permitting and the need to apply for an allocation permit modification for the new Well 14. We are now still waiting on our modified allocation which must happen before we spend any money on the pilot study. The project cost has increased based on engineering review which has occurred since the project was initially proposed when a placeholder value was set in the out-years.

The 2016 CIP showed a reserve carryforward of \$75,000 and an additional \$75,000 of current resources. The 2017 budget contemplates applying additional reserves to this project on top of those appropriations. The reserve funding, or "prior" funding, is shown in the year of expected expenditure instead of just lumped together as a prior amount.

(8) Re. W1302: This project page in the 2017 CIP is inconsistent with the 2016 CIP. Again, the description remains the same, but the total cost estimate has been cut in half -- Why? Also, the \$40,000 allocated in 2016 are not accounted for. If the total cost now should only be \$40,000, then we should not need to appropriate any additional funding in any future years.

Several of the wells originally proposed for abandonment by the previous PWWR director will be utilized by the proposed Laird Tract Well Field project should that move forward, so we removed funding that would have gone toward those wells. Additionally, several others will be addressed as part of W1503 as they are associated with that facility. The CIP was updated to reflect this change.

(9) Re. W1304: Somehow no money was spent on this project in 2016 (same est. spend in 2016 CIP as 2017 CIP), but the Louviers Tank was addressed. How was this done so cheaply? Is the Windy Hills tank the last one to be addressed?

We will be addressing Louviers in-house this fall as part of painting project but have not yet spent the money (when we prepared this sheet we anticipated it would have already been completed as of now but the project was delayed while we addressed automation issues at the Paper Mill Booster Station). Windy Hills is indeed the only one remaining at this time.

(10) Re. W1201: Which winter is "this past winter", which was already referenced in the 2016 CIP? Why did the cost increase by \$100,000 (or ~25%) from last year's estimate?

The cost increased due to the project being designed and bid in 2016 but coming back \$100,000 above estimates resulting in it being delayed until 2017. We have updated the CIP to reflect the change.

(11) Re. W1101: This was supposed to get funded at ~ \$2.9 million in 2017/2018. It is not in the 2017 CIP anymore. What happened?

We have changed philosophy and are now focused on leveraging our groundwater resources which, for generally the same amount of money, provide a better product and more drought resilience. This project originated with the previous PWWR director, and you will notice construction has always been located in year three or four of the CIP. The preliminary engineering analysis concluded that our dam is not in as bad shape as originally thought which gives us confidence to push it out of the five-year CIP. Also, we have a debt cliff in year 6 when the reservoir is paid off which will free up around \$1,300,000 in funding annually which will make covering the cost of this big budget project easier to cover if we are still using only cash financing. Lastly, the improvements to groundwater sources may impact the overall size of the new intake. If we are able to produce more via groundwater our new intake may not need to be as large as it would have otherwise been. The groundwater sources will also reduce the amount of water purchases needed during the intake project which are now almost \$9,000 per day when the Curtis WTP is offline.

We did revise our CIP to put W1101 back into the capital program. We have included \$172,440 to be split between 2017 and 2018 for repairs to the waste way and bar screen.

(12) Re. W1104: The 2016 CIP stated that you were pleased with the post-treatment lime injection. What has changed that we now need to implement a different solution at an additional \$100,000?

Previous to 2015 only projects with current year funding were included which made it difficult to quickly reference all active projects. We failed to update the sheet description last year when we put it back into the CIP for tracking. The CIP sheet for W1104 is correct in this year's budget. At the time we were still working to identify a solution and lime was still on the table.

We have since determined that the temporary configuration resulted in a pile of undissolved lime in the finished water tank which had to be removed causing operational issues. We have also had operational issues with our lime delivery systems at both treatment plants and the lime silo at SWF needs to be rehabbed and painted which wasn't included in the original project budget. Needless to say, we are no longer happy with that option. This cost would have almost equaled the anticipated cost to change to caustic soda which will eliminate the operational problems associated with lime.

(13) Re. W0503: The annual funding levels are not correlated to the number of wells to be rehabilitated each year. That seems to be a problem. Also, why do some wells need to be rehabilitated after 5 years and others only after 16 or 17 years?

Most wells need to be rehabbed after four to five years. Well 14R has not been run since it was drilled aside from some sampling due to contamination. Similarly, Well 16 has not been run due to contamination aside from some sampling. Well 20 is used very infrequently but

will be brought online with the Laird Tract WTP project, same for Well 23. In addition, The CIP for 2018 was amended to \$56,000, and 2019 is now reflecting \$29,000.

(14) Re. W9302: Last year, an argument was made for a specific SCADA product, for interconnectivity with electric. This year, a different product has been selected, which almost doubled the cost of this project. Why? Why are the funds coming from the reserves?

We actually argued to use the same integrator as Electric back in fall of 2014 but fairly quickly determined that their lack of experience in the Water and Wastewater industry was going to offset any potential savings from working with them. Additionally, through working with Electric's integrator and researching on our own we are now planning to utilize cellular communications which further diminished the benefit of partnership. The work that Digitalogic performed will be able to be used by the new integrator. We have also realized that our placeholder values for out years were unrealistically low. Our current consultant is currently working on a proposal for all of the remaining work that will allow us to modify our out-year budget to accurately reflect the true cost of the work to be completed. Unfortunately, due to timing of award of the contract this was unable to be completed in time to be included in this year's CIP so we would anticipate the values changing in next year's CIP unless our revised estimate was spot on.

(15) Re. W9308: The justification states that we should budget \$1.5 million/year. Then why is this not done? Why is there an alternative schedule, resulting ultimately in only 50% of the needed funding?

This change was done due to the realities of funding and the need for one-off projects at our water treatment plants eating up the available cash financing. If we are able to utilize debt-financing, we would look to revise this back upward. Also, the reservoir debt cliff in year six will allow us to have larger projects in years 6+ to make up ground for what was deferred in years one through five (outside of any funding that is allocated toward the intake project).

(16) Re. W8605: The justification states that for the SWF tanks, \$100,000 was budgeted for water purchases, split between 2017 and 2018. But it appears that the \$50,000 to appear in 2017 went missing.

You are correct. We removed the \$50,000 from 2017 but failed to get it into 2018. We have updated the 2018 total to \$700,000 in order to capture the \$50,000 that was removed from the 2017 budget.