

TOWN OF PROVINCETOWN - BOARD OF SELECTMEN

SPECIAL MEETING – MONDAY – NOVEMBER 14, 2011 5 PM

TOWN HALL – JUDGE WELSH ROOM

Chairman Elaine Anderson convened the meeting at 5:15 PM noting the following
Board of Selectmen attending: Elaine Anderson, David Bedard, Austin Knight, John Santos and David McChesney

Other attendees: Town Manager Sharon Lynn, Assistant Town Manager David Gardner

Recorder: Vernon Porter

The following are minutes, in brief:

1. Water and Wastewater Update

Attendees: DPW Director David Guertin, Facilitator David Guertin, Environmental Partners Mark White, AECOM Project Manager Rob Adams and Facilitator John Goodrich.

DPW Director David Guertin introduced those attending and gave a brief update. In constant contact with DEP as they seek to shape what the expansion is going to be on Wastewater. Will be going to Boston to receive a Wastewater Utility Award on January 25, 2011 at the Boston Marriott Copley Place Hotel from the New England Water Environment Association.

Facilitator John Goodrich:

WATER UPDATE

The Water Team has a lot of good news to report on this month, including additional developments since your report was prepared last week. The Sanitary Survey Report issued November 3rd by the Chief of the Resource Protection Bureau of MassDEP showed no violations or deficiencies, which is a major accomplishment for the Water Department. It is almost unheard of that a public water supply in Massachusetts receives a report with a finding of no deficiencies.

The peak season pumpage and water use billing for the period from mid-April to mid-October confirms the substantial reduction in unaccounted for water previously reported to the Board. The amount of unbilled water was nearly 42% lower for the 2011 peak period billing period compared to the previous year. This is the direct result of the 18-month long leak detection, inspection and management program undertaken by the Water Department with the assistance of Woodard & Curran. With over 97% of the accounts inspected, the Water Department can now say that the USDA grant-funded inspection program has been a success.

It is also clear that the Water Department should continue a number of elements of this program on an on-going basis in order to achieve the unaccounted for water goals that have been set by the state and the Water Superintendent, as well as obtain the hoped for benefits from this reduced pumpage and lower operating costs. The recommended on-going programs include:

1st. Contracting every 6 months with Hydra Tech for acoustic detection surveys, to be supplemented as staff resources permit with acoustic detection performed by Water Department personnel who have been trained in the use of the equipment. This has been shown to be a very effective way to locate leaks.

2nd. Inclusion of approximately \$150,000 per year in the CIP budget over the next 8 years to install 100 meter pits a year at the curb stop and relocate the meters for those properties with service mains > 50 feet. This is a high priority of the leak management program, particularly for those services with IPS plastic pipe.

3rd. Continued replacement of older meters so that all meters are replaced every 10 years. The field experience gained through the inspection program has shown that replacing older meters should be a priority to minimize future leaks. The recent focus of the USDA grant-funded program has been on changing out those meters with missing pins when the pin could not be replaced due to the age of the meter. Going forward, the focus will be on maintaining a regular schedule of meter replacement as a part of the annual Water Department budget.

4th. On-going Water Department operations including auto-reads, seasonal turn on and turn off, and other account servicing activities to ensure inspection of the few remaining properties as well as early identification of leaks and potential leak situations. With over 98% of the accounts already on auto-read, this will be a particularly valuable tool for early detection of service line leaks.

5th. On-going review with the Water & Sewer Board - which will now include three new members from Truro for all water system matters – for the next steps to be taken with the high priority non-compliant taps before the meter and the non-compliant pipe accounts, as well as any additional inspection procedures that might be required for either building permit approvals or property transfers.

Your Report also describes all of the progress that has been made with the USDA and Article funded capital improvement projects for the Water System. Construction of the raw water transmission main along Route 6 from South Hollow to Knowles Crossing began today, starting at the South Hollow end, following notification and coordination with the MassDOT, the Truro Police Department and the Truro Town Administrator. The estimated time to complete this construction is 6 weeks.

The Town remains in a very favorable position to receive a low-interest loan from the USDA for this project, but the timeframe for their budget approval and any award is now after the first of the year. The good news is that we are eligible for funds even though the work will have been done.

The approval process for the North Union Field water source development continues to move forward as scheduled. The MassDEP formally approved the Pumping Test Report on November 4th, providing for 734,000 gallons per day of withdrawal, and the MassDEP review of the Water Management Act Permit is expected to be completed by the end of February. This permit review requires public notification, which will occur this week.

In addition, at a meeting held November 3rd with the Truro Town Administrator and attended by Town Manager Sharon Lynn, Sherry Prada from the DPW, and Mark White from Environmental Partners, it was agreed that the public meeting that has been requested by the Truro Board of Selectmen to present both the construction plans for North Union Field and the preliminary design of the Knowles Crossing Treatment Plant should be scheduled for either the last week of November or the first week of December.

Finally, significant progress has been made this past month on the plans for the Knowles Crossing filter building. This has involved a number of work sessions between the design team led by Environmental Partners and the Water Superintendent and his field and operations staff. This has resulted in a building plan that can meet all of the most important program and operational elements

of the Water Department within the available USDA grant and Water Article funded budget. The design for the approximately 7,500 sq. ft. filtration building includes the treatment structure housing the membrane to be provided by Siemens, with funding from the MCDBG grant, a two-bay garage, parts storage and a small administration area for the Water Department.

The next steps include continued work sessions to fine-tune some of the details of the facility and equipment so that the Water Department will be able to utilize these facilities as efficiently as possible. Including the field staff that have the best understanding of these details at this stage of the design development will ensure that the Water Department will have the facility that they need to operate effectively and efficiently once it is operational by the end of 2013.

The Water Department requests that the Board award a contract amendment in the amount of \$448,000 to Environmental Partners Group for the final design services and permitting associated with this Knowles Crossing water treatment filtration building, and Mr. Mark White of Environmental Partners is here tonight to answer any questions that the Board may have on either the Knowles Crossing program or any of the other USDA grant and Article funded water improvement program elements.

WASTEWATER UPDATE

The Sewer Team also has a lot of good news to report on this month, including additional developments since your Report was prepared last week. I would like to start with an overview of the “big picture”. For the past 15 years, Provincetown’s wastewater facilities planning has been based upon the assumptions that only a portion of the town would need to be connected to the municipal sewer, and that the treatment and disposal capacity to serve the needs would always be a limited resource. This year, both of these assumptions may be changing. The important developments on the demand side are:

1st. The recent outreach program has shown that the interest for a sewer connection in the areas to be served by the Phase 1, 2 and 3 sewer system is now 3 times the interest identified when Phase 3 was first brought forward 3 years ago – approx. 225,000 gpd of Title 5 flow versus about 75,000 gpd identified in 2008. That is a huge increase in the needs from ACOs, additional economic development permits, and interest from property owners. With your approval of AECOM’s Change Orders tonight, we will be able to serve about 2/3rds of the flow from these properties, with the remaining 1/3rd still under review as to whether or not the betterment revenue can cover the costs.

2nd In addition to the interest in the areas to be sewerred, the outreach program has shown that there is approximately another 100,000 gpd of interest from ACOs, municipal and public service uses, and property owners who want to connect in other areas of town that would require “Phase 4” sewer extensions to serve them. AECOM is continuing to review each of these potential sewer extension areas to determine which ones have enough interest so that the betterment revenue and any other funds - including grants for public service uses - could cover the cost to serve the area.

3rd. The Town needs to plan for the additional flows to the sewer system that will be allowed under the Growth Management Zoning By-Law, as well as for important future municipal and public service uses. The preliminary analysis included in your report shows that we need to plan for an average of 5,000 gpd a year in additional sewer system flows for this managed growth. In addition, the operating reserve that AECOM maintains at the Plant can serve as a reserve for any large unforeseen public service uses that are brought forward and approved by Town Meeting.

4th There is a growing interest in looking at both the potential to extend the sewer to many other areas of the town in the future as well as regional wastewater approaches. The Cape Cod Commission

is promoting regional solutions as well as looking to the state for more funding for Cape sewer projects, and when State Senator Dan Wolf brought the Environmental and Energy Secretary to see Provincetown's very successful design/build/operate Treatment Plant last week, he emphasized the need to look at new regional approaches for wastewater planning in the future.

But, as we take all of this interest into account, it is important to keep in mind that the success of Provincetown's sewer system is based in part on some key policies: (i) we have kept the betterment rate competitive with the cost to comply with Title 5 on site for most property owners which provides an incentive to hook up, and (ii) we have a largely voluntary participation sewer system with all capital improvements paid for by new users which means we continue to receive voter support for new expenditures, a situation that other Cape towns do not enjoy. To extend the sewer to those areas of town with a low density of flow could cost \$100 to \$150 per gpd or more, rather than the less than \$50 per gpd it now costs. Who is going to want to pay that particularly when they may have a newer Title 5 septic system? Provincetown's unique approach does work so we should be careful about making changes to it that may have unintended consequences.

We also have some equally important developments on the supply side, including:

1st. The capacity at the Treatment Plant will be increased from 575,000 MDF to 750,000 MDF by the end of 2012, allowing all of the Phase 3 properties to connect as well as providing capacity for important future needs. We have been notified that the National Heritage and Endangered Species review has been concluded with no concerns identified so we can now move forward with the local Conservation Commission Administrative Review, as well as the planned site visit by the Cape Cod Commission in preparation for the formal request for a modification to the DRI. This increased capacity will allow the Town to connect more than twice the Title 5 design flow planned when the Phase 1 sewer system was approved more than 10 years ago.

2nd Treatment plants are generally upgraded after about 20 years – this is the normal life cycle for such facilities and at the time that the Plant is upgraded, additional capacity can be provided. Given the clear need identified for more capacity in the future, AECOM has recommended that we begin the planning for either an upgrade or an interim increase in capacity once the Maximum Daily Flow at the Plant reaches 80% of the permitted level. This should not occur for a number of years since the planned additions in Phase 3 are not expected to bring us up to that level. Actual and forecasted flows and mass loadings will be reviewed with the Board at the time any recommended Phase 4 sewer extensions are brought forward for approval.

3rd. The on-going monitoring for the disposal beds required in our CCC DRI permit continues to show that the beds can handle even more flow than the currently approved 750,000 MDF rate, and the MassDEP has recently approved higher flows for other communities. Therefore, disposal bed capacity is no longer expected to be a limiting factor in the future – this is a huge change from the original sewer system planning undertaken more than 10 years ago.

4th. The downtown vacuum sewer was built based upon the needs identified at the time with the assumption that there would be very little increased flow to the vacuum sewer in the future. But, once the sewer system was operational, the interest in a connection and additional flows from economic development grew. Capacity was freed up on the West Main during the construction of the Phase 2 Shank Painter gravity sewer, and throughout the vacuum system with the East End and West End grinder pump redirects that were completed earlier this year during the Phase 3 construction.

But the interest continues to grow – the summer outreach program identified 21,000 gpd more interest for sewer connections on the vacuum sewer. More capacity **can** be made available on the

vacuum system now that the new force mains have been installed on large portions of Bradford Street from the East End to the West End parallel to Commercial Street, since it is cost-effective to re-direct some of the larger users from the vacuum to the new force mains, thereby freeing up capacity on the vacuum sewer.

The bottom line is this: going forward, Provincetown's wastewater facilities planning will now more closely resemble the planning done in other communities where treatment and disposal capacity and sewer extensions are carefully planned to keep pace with the demand, while at the same time attempting to maintain all of the very positive aspects of the Town's unique approach to wastewater planning.

Turning now to some of the important developments included in your Report. AECOM and the Sewer Team have two clear priorities they need to focus their efforts on:

First, completing the sewer extension construction to serve those properties that may be able to connect during Phase 3 in the areas that have been permitted and approved for borrowing authorization. This work is scheduled to be completed by June 2012. The fall construction is going very well with few complaints or other problems to date. Trench paving has been done in new construction areas and several areas that were worked on last spring will be paved during the first half of November. Please be aware that the sewer paving is being done during the daylight but the same contractor is being used by NSTAR to pave after dark. During the winter, construction will occur on Rte. 6A from Commodore Avenue to Mayflower Avenue and from the Bradford/Commercial intersection to Snail Road, on the side streets in the Beach Point area, on Snail Road, and on Bradford Street between Hancock and Priscilla Alden.

The second priority is obtaining the approvals, completing the design, and undertaking the construction to increase the Treatment Plant capacity by the end of 2012. Again, this effort is going very well but most of the work is still ahead of us.

Given these priorities and the resources that are available, the work needed to review all of the additional interest and all of the future planning scenarios will need to be a 3rd priority and will take time to complete. We need to make sure that we have successfully completed Phase 3 before we look at moving forward with any Phase 4. In addition, AECOM will need to observe at least two years of actual peak period flows at the Plant once all of the Phase 3 properties are on line to be able to provide MassDEP with all of the hydraulic flow and mass loading information needed for any future Plant upgrades or capacity additions. In the meantime, **we will have** sufficient capacity to meet any important public health, municipal, and public service use needs.

We have two motions for the Board tonight, each in two parts. All of the requests are for additional funding authorization for the Phase 3 program either as a follow up to the October 24th Special Town Meeting approval of Article 1 or for the USDA grant-funded paving work. In addition to the paving, AECOM's Change Orders include the work to serve additional Phase 3 area and Phase 2 "late-comer" properties. Phase 4 engineering will include the evaluation of options for optimizing the existing vacuum system and determining how the EDP requests can be served, working with the Town to review the results of the summer outreach program for those areas outside the Phase 3 area, and providing recommendations on the most cost-effective options to meet the Town's needs. For the USDA Change Order, as has been the case in the past, your approval is contingent upon USDA's sign-off on Environmental Partner's third-party review.

AECOM's Article-funded Change Order includes the work to serve an additional 45 properties with a Title 5 design flow of 45,500 gpd. This is a little higher than the numbers shown in Table 1 in your

Report since AECOM was able to complete their review of the side streets in the Kendall service area and determine that 7 more properties can be served cost-effectively. With these additions, the total interest to be served in all of the sewer areas of the town through Phase 3 will now be 915 properties with a Title 5 flow of a little less than 940,000 gpd. This is about 75% of the flow that can be permitted once the Plant expansion has been completed next year based upon the 2011 observed ratio of maximum daily flow to Title 5 design flow.

There are still two potential additional Phase 3 areas to be reviewed – the section of Bradford Street that would need to be served by a new pump station in the vicinity of Conway Street, and the section of Commercial Street known as the “E-7” planning area that cannot be served by one of the other pump stations due to the topography. Neither of these areas have ACOs. Only the Conway area has already been permitted.

The review by AECOM and the Sewer Team follows the same protocol used for the review of every single subarea studied for a gravity sewer extension in both Phase 2 and Phase 3. Can the expected revenues from the subarea cover the cost for the collection system and any pump station or other structures needed to serve the area? The only exceptions to this “test” – which has been confirmed by Board policy since the approval of the Phase 2 sewer extension – is when a grant can be used to cover the additional cost of serving an environmentally-sensitive area such as Beach Point, or a public service use, such as MacMillan Pier, Seashore Point, Maushope or Outer Cape Health.

This review was relatively easy for Phase 2 since there was only one very large subarea – the Shank Painter Basin – served by one large pump station, plus the separately funded Seashore Point pump station funded by a USDA grant. The review has been much more involved for Phase 3 because there are many subareas each of which requires its own pump station because of the topography. The review has needed to look at which of these subareas have sufficient interest to cover the cost to serve them. This is the same analysis used previously in the town-wide outreach programs to define the areas for further study for Phase 2 and for Phase 3 of the sewer system.

The \$9 million of USDA grant funds were requested for and are being used for several important purposes that could not have been funded by the new users alone:

1st. The West End and East End grinder pump redirects that freed up capacity on the vacuum sewer, including the construction of the new West End pump station and the new force main from that pump station along Bradford Street to Shank Painter Road.

2nd. Construction of the force main from the Treatment plant to Beach Point to serve that high-priority low-lying and environmentally sensitive area that has several large ACOs and many properties with cesspools.

3rd. Water main replacement and stubs for future connections where Phase 3 sewer work occurs so that once the curb-to-curb paving is done in those areas, the paving will not need to be dug up for water main work or for sewer stubs.

The USDA grant funds have **not** been used to subsidize the costs for those subareas that will be served during Phase 3. The Thistlemore, Snail Road, and Commodore Avenue Pump Station subareas all have sufficient interest to cover the cost of the collection system and the pump station in their gravity flow subarea, as well as to cover the cost of providing the additional plant capacity to serve their needs. And, the Kendall subareas were only added after there was enough interest so that the revenues would cover the cost of extending the sewer on Bradford Street between Hancock and Priscilla Alden. Likewise, the revenues from the properties that are being added to the vacuum sewer

during Phase 3 and the late-comers that are being added in Phase 2 cover the cost to serve these additional connections.

AECOM and the sewer team will continue to review the Conway Pump Station subarea and the “E-7” Commercial Street subarea to determine if there are any engineering approaches that can be used to serve either of the areas cost-effectively. Given the projected betterment revenue at the \$45 per gpd rate – approximately \$400,000 for the Conway area and less than \$250,000 for the Commercial Street area – this will be difficult. This same analysis will also be applied to all of the potential Phase 4 subareas.

MOTION: *Move that the Board of Selectmen vote to award Change Orders to AECOM in the amount of (i) \$316,267.00 from USDA grant funds and (ii) \$1,414,415.00 from Wastewater Articles.*

Motion by: *Austin Knight* **Seconded by:** *John Santos* **Yea 5 Nay 0**

MOTION: *Move that the Board of Selectmen vote to award Contract Amendments in the amount of (i) \$30,000 to Mark Abrahams and (ii) \$30,000 to John Goodrich from Wastewater Articles.*

Motion by: *Austin Knight* **Seconded by:** *John Santos* **Yea 5 Nay 0**

3. EAST END PROPERTY OWNERS – Phase III Sewer Connection.

Attendees: Doris Seavey (755 Commercial St.,) Craig Lyon, (789 Commercial and also trustee of the Long Point Condo Association which consists of 789, 791, 793, and 795 Commercial) and Johannes (Hans) Eijmberts, (765 Commercial. his partner, Wiebe Tinga owns 765 Commercial.)

All attendees, East End property owners, encouraged the Board of Selectmen to allow them to hook up to the sewer during Phase III Sewer Connections. Ms. Seavey presented information to the Board. (Attachment #1).

Elaine Anderson - We certainly appreciate you coming before the Board this evening, and you hit the nail on the head when you asked that the project be reviewed very carefully by the Engineers, who, indeed, have this area in review. So, you have not been totally neglected, although you may feel so. Don't know if you heard earlier the complexity of the system and how much demand it can hold; how expensive it is to get the pipelines and pump stations installed, but if it can be done, I think this team will find a way to do it.

I don't think that any of us are in a position to go further than to recognize your desire. We want to thank you very much for coming this evening, for all this information, and to let you know that you are in the review process with the Sewer Team.

Motion to adjourn by David Bedard at 6:21 PM

Minutes transcribed by: Vernon G. Porter, Secretary to Board of Selectmen
November 15, 2011