



TOWN OF MIAMI
Wastewater Advisory Board Work Session
Town of Miami Wastewater Collection System Replacement Project
FRIDAY, AUGUST 11, 2017 AT 11:00 AM
MIAMI TOWN COUNCIL CHAMBERS
500 W SULLIVAN STREET, MIAMI, ARIZONA 85539

Meeting Minutes

I. Call to Order

Meeting was called to order at 11:03 AM by Jay Spehar.

II. Roll Call

PRESENT: Jay Spehar, Jerry Barnes, Ray Webb, Don Reiman.
John Trujillo joined the work session at 11:12 AM.

III. New Business

a. Phase 3-5 Update

- Mark Ipson with HILGARTWILSON gave a brief overview of the Phase 3-5 project. The design plans prepared by AMEC were separated into three plan sets to group the work within certain portions of the town. Although the plans have been separated, the project construction will still be under one single contract. AMEC recently revised the plans to reflect the findings of recent sewer video investigation. The plans have been modified to show large portions of the project with cured-in-place (CIPP) rehabilitation and to show which portions of the pipe will now be replaced and which portions will be kept as-is. The Town and HILGARTWILSON reviewed the revised plans in June 2017 and compiled over 500 redline comments. Discussion was held about the CIPP installation process and construction phasing. Discussion was also held regarding a technology that Jerry Barnes had recently learned about, which can be used to rehabilitate manholes in a cost-effective manner. The project team will look into this method of manhole rehabilitation to see if it would be feasible for the Miami project. Rehabilitating the manholes in lieu of replacing them where possible may result in some cost savings.
- Discussion was held regarding the cost savings on a per linear foot basis for repairing the sewer using CIPP instead of replacing the old sewer mains with new mains. It was mentioned that AMEC estimated the CIPP work would cost approximately \$60/ft, while new sewers would cost approximately \$80/ft, resulting in a cost savings of approximately \$20/ft. This does not include savings realized from pavement replacement or other impacts from open trenching. Discussion was held to determine if it is in the best interest of the project to coat or rehabilitate all of the manholes now

while funding may be available. The plans already call out rehabilitation of many manholes. It was decided that the bid should include an add alternate to include costs for rehabilitating all the remaining manholes with a liner.

- Mark Ipson gave an overview of the anticipated service lateral replacement and CIPP process and how service laterals are tied back into the rehabilitated sewer. It was noted that any deficiencies in the lining discovered after the pipe is cured will be replaced by the CIPP contractor at their expense. Additional discussion was held about the CIPP technology, including its anticipated service life, resin thickness, resistance to scour and corrosion, and flow characteristics.
- It was noted that the cost savings between CIPP and replaced sewers would actually be higher than previously discussed due to the savings on pavement replacement that would not be needed through CIPP. Jerry Barnes asked what the total estimated cost savings would be with the CIPP work. Mark Ipson explained that the Phase 3-5 project was estimated in 2010 to be approximately \$12.4M using standard open-trench sewer replacement, while the newly-proposed CIPP and removal and replacement work is now estimated to be approximately \$10.6M, including work deferred from Phase 2. Additional discussion was held about the total costs to date and how much is anticipated to be saved when the project is complete. Joe Heatherly reiterated that USDA will not pay for full-width pavement replacement unless it is necessary and that any cost estimates moving forward should have the pavement replacement line items separated out.
- Further discussion was held regarding pavement replacement. Mark Ipson explained that when AMEC updated their plans, they identified any areas with open trench sewer work as having full-width pavement replacement. As such, the quantity of pavement replacement shown on the plans will ultimately be scaled back since the Town and HILGARTWILSON have determined that full-width pavement replacement will not be done at all locations. Discussions have been held with USDA to explore the possibility of using add alternates for areas such as Miami Gardens, pavement replacement, and other areas where cost savings may be realized due to the relatively good condition of the existing sewer, and USDA seems to be open to the idea. Additional discussion was held on how to prepare the bid schedule and how to handle add alternates.
- Further discussion was held regarding which areas of the project will not need full-width pavement replacement. Steve Flinn with HILGARTWILSON provided an overview of the Town's and AMEC's work in walking and videoing each street, assessing the current pavement conditions, and identifying recommendations for minimizing pavement replacement where possible to keep the project in budget, while keeping open the possibility for full-width chip seal in some areas to provide a good finished surface. Steve stated that he estimates the amount of full-width replacement will reduce by about 50% from that currently shown on AMEC's plans.
- Discussion was held regarding which add-alternates to include for the Phase 3-5 project, so as to put the available funds to the best use. It was explained that over the course of the project, some residents have come to expect that the sewer replacement or rehabilitation work completed along their street will involve full-width pavement replacement. Joe Heatherly indicated that he wants to make sure that the citizens fully understand why full-width pavement replacement isn't provided in front of their home if they are along a stretch of cured-in-place rehabilitation instead of open trench installation. Additional discussion was held on how to handle the bid add alternates and how to mitigate any potential concerns of the Town citizens. Jerry Barnes suggested that the add alternates could be expressed in quantities that tie directly to the original

bid items so that only additional quantities are added with the add-alternates. Additional discussion was held regarding the add-alternates and whether they should be considered as change orders to the selected contractor's original contract.

- Discussion was held regarding current potholing efforts by Arizona Water Company and Southwest Gas. Mark Ipson reported that Arizona Water Company and Southwest Gas have been potholing and locating their utilities to verify and eliminate potential conflicts with the Phase 3-5 sewer mains. It was also noted that the Town and HILGARTWILSON have completed their initial plan review and site walks for Phases 3-5.
- The revised plans for Phase 3-5 were submitted to ADEQ for review on August 9, 2017. In a meeting held with ADEQ a couple weeks prior to the submittal date, ADEQ indicated that the Town needed to submit multiple applications for the proposed improvements in Phases 3, 4, and 5 – one for each contiguous segment of sewer to be replaced. ADEQ does not review CIPP work since they consider it to be repair work and not new sewer installation. Although this takes out a large portion of the project to be reviewed, the replacement portions of the project are now considered individual projects per ADEQ and as such, a total of 20+ applications need to be submitted for the Phase 3-5 project. This piece-meal approach for the submittals and approvals will actually result in lower ADEQ fees than if ADEQ had to review the entire set of plans as one contiguous improvement. The benefit of the piece-meal process is that the Town will be able to obtain an Approval of Construction (AOC) for completed portions of the sewer work as soon as that work is completed instead of having to wait until the whole project is complete. This will help avoid issues experienced in Phase 2 where the AOCs expired during construction and the Town had to resubmit and repay the entire application fee again to keep the project moving along. Additional discussion was held regarding the process that will be followed for obtaining AOCs as the project progresses.
- The Phase 3-5 plans and specifications were submitted to USDA in early August. USDA has indicated it will take about 4 weeks to complete their review and provide comments back to AMEC.
- Prior to the additional video investigation work, AMEC had identified the easements needed for the Phases 3-5 based on the original plans, and all of those easements are now in place. After the video investigation and re-design work to include CIPP and modify several sewer alignments, an additional 11 easements have been identified as needing to be obtained. Out of these 11 easements that are needed, nine are for existing sewers that go through properties (i.e., sewers to be rehabilitated using CIPP), and the remaining two easements are for new sewers for Phases 3-5. Additional discussion was held about which easements need to be obtained and the plan moving forward to obtain such easements.
- Discussion was held regarding sewer service laterals to each property. Service laterals for Phase 3-5 will only be installed to properties that are occupied. Vacant or abandoned homes or lots will not have service laterals installed at this time. Service laterals for such lots will be installed at the time they develop and the landowner or developer will pay for the cost of installation. The lots which should receive service laterals as part of this project will be made on a case-by-case basis to ensure all occupied lots currently connected to the sewer are connected once the project is complete. Joe Heatherly reported that right-of-way approval letters are being sent out to each landowner to obtain approvals for any work that may need to be completed on private property.
- An overview was provide for the updated Phase 3-5 schedule. It is anticipated that USDA will take until the end of August to review the plans and provide comments to

AMEC. AMEC will then take approximately 2 additional weeks to update the plans per the comments received and resubmit to USDA and ADEQ, as applicable. In the meantime, the bidding documents, including bid schedule, bid package, and other front-end documents, are being prepared and updated. Once they receive the updated plans, it is anticipated that USDA and ADEQ will take another two weeks to review and approve the revised plans. Bid advertisement is anticipated to commence at the end of September and go through the end of October. Once bids are received at the end of October, it will take approximately one month to open, review, and evaluate the bids as well as obtain recommendations and approvals from the WWAB, Town Council, and USDA. Discussion was held regarding concerns about the construction schedule, as construction will be taking place during the spring monsoon season, when the Town typically sees a lot of rainfall. A contingency plan should be considered for bypass pumping that may be needed. Additional discussion was held regarding infiltration to the existing sewer system and how this has caused major problems in the past.

b. Phase 2 Update

- Joe Heatherly gave an overview of the issues experienced in Phase 2. Although some minor issues were to be expected, the quality of work and the quantity of the work issues did not come to light until last December. The Town indicated that it is having the same geotechnical firm that they recently used to evaluate the original sinkholes come back out to the Town to analyze at least four additional sites for backfill compaction. The Town's ultimate goal is to get the Phase 2 concerns addressed and the Phase 2 project wrapped up. To this end, the Town is exploring various options for getting the issues addressed and for holding accountable those who are responsible for said issues.

c. Public Comment on the Operation, Financing, and Construction of the Sewer Project

- Sammy Gonzales (789 W. Pershing Circle) thanked the Wastewater Advisory Board members for their time, effort, and commitment to the Town of Miami Sewer Replacement Project and commended them for a job well done.

IV. Adjournment

- Jerry Barnes motioned to adjourn the work session. Seconded by Ray Webb. All in favor. The work session was adjourned at 1:35 pm.