



WEST MEMPHIS UTILITY COMMISSION

604 East Cooper
Phone: 870-735-3355
West Memphis, AR 72301

CAP MEETING (1-08-2020)

Attendees Onsite:

- **W.M.U.C.-** Todd Pedersen, Ward Wimbish, Paul Holloway, AJ Elhaj, Kristen Carpenter, Denise Bosnick
- **F&A-** Tim Verner, Jeff Old
- **RJN-** Mac Compton

Project Members:

- **W.M.U.C.-** Todd Pedersen, Ward Wimbish, Paul Holloway, AJ Elhaj
- **F&A-** Tim Verner, Jeff Old.
- **RJN-** Mac Compton, Stephen Jeffus.

The Following Actions that were discussed:

A. Review Meeting Minutes

- Everyone agreed to last meeting notes, and no comments were made.

B. 2019 SSES Study

- Pedersen stated that WMU will go through the city action plan and identify the manholes that were physically located and then field locate for RJN.
- Compton stated that RJN will start mobilizing CCTV crew within the next two weeks.
- Compton stated that RJN will hold off on the dye testing until WMU locate all manholes that are listed in the city action plan.
- Compton stated that RJN will have 2019 SSES by the end of March 2020.

C. Sewer System Model

- Verner stated that RJN is going to provide an addendum to the final report for 5-year and 10 year 24-hour event.
- Verner stated that once RJN runs the model for the 5-year and 10-year event, FA will send the report to ADEQ with all the data.
- Verner will propose a treatment upgrades to allow the WWTF an average flow 12 MGD daily and 20 MGD by meeting some limits.
- Verner requested from Holloway to get data for all 24-hour effluent sampling.



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D. WWTF Hydraulic Capacity Assessment

- Verner stated that Fisher Arnold are still on track to complete assessment with WWTF recommended hydraulic improvement.

E. WWTF Recommended Hydraulic Improvement Report

- Verner stated that FA will use 10-year 24-hour event for the WWTP design with 20 MGD capacity.
- Verner stated that Fisher Arnold are still on track to complete WWTF recommended hydraulic improvement draft.

F. 2019 Manhole Rehabilitation

- Elhaj stated that ICM (Contractor) are currently working on replacing manhole frames, covers, and frame seals.

G. Operation Assessment for 3 Pump Stations

- Old stated that he would coordinate with Elhaj on reassessing pump station 3 by conduction a draw down.

H. 2019 Sewer Line Point Repair

- Elhaj stated that the sewer point repair on West Walnut started on November 18, 2019.
- Elhaj stated that West Memphis Utilities contacted with CenterPoint to meet and identify where the main gas line is located. There was a 2-inch service gas line that was going North of Walnut that's connected to 4-inch gas main.
- Elhaj stated that CenterPoint crew came out and relocated the 2-inch service line out of the way.
- Elhaj stated that Chris-Hill had excavated and installed a safety trench box for sewer main, but the contractor was not able to locate sewer line at 10 ft deep.
- Elhaj stated that Chris Hill had scheduled xylem to come and install a Dewatering well points. Xylem came and install 6 dewatering well points (12 VF) on one side. On December 4 Chris Hill had scheduled another 6 more dewatering well points for xylem to come and install them.
- Elhaj stated that Chris-Hill had installed the first pipe to the sewer main with existing tee. The tee was connected to a sewer main that goes south of West Walnut and the second joint was a 4-inch service line that's going west toward the field.



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- Elhaj stated that Chris-Hill Replaced all 12 dewatering well point with longer dewatering points. The existing dewatering points are 12 vertical feet and are being replaced with 25 vertical feet.
- Elhaj stated that Chris-Hill crew had done formwork on-site for manhole concrete footage and pour concrete on-site.
- Elhaj stated that Chris-Hill started on 7th and Jefferson with 40 feet deep injection cementation grout.

NEW BUSINESS

- Pump Station Number 9 Modifications
- Wastewater Treatment Plant Expansion Study
- Equalization Basin Rehabilitation
- Avalon street Force Main Extension & Pump Stations Refit



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CAP MEETING (2-12-2020)

Attendees Onsite:

- **W.M.U.C.-** Todd Pedersen, Ward Wimbish, Paul Holloway, AJ Elhaj, Denise Bosnick
- **F&A-** Tim Verner, Jeff Old
- **RJN-** Mac Compton

Project Members:

- **W.M.U.C.-** Todd Pedersen, Ward Wimbish, Paul Holloway, AJ Elhaj
- **F&A-** Tim Verner, Jeff Old.
- **RJN-** Mac Compton, Stephen Jeffus.

The Following Actions that were discussed:

A. Review Meeting Minutes

- Everyone agreed to last meeting notes, and no comments were made.

B. 2019 SSES Study

- Elhaj stated that the city action plan has 16 manholes that were physically located at one point and were able find 4 manholes as of right now.
- Compton stated that RJN are currently doing CCTV and should complete within the next couple of weeks.
- Compton stated that RJN will hold off on the dye testing until WMU locate all manholes that are listed in the city action plan.
- Compton stated that RJN will have 2019 preliminary SSES by the end of March 2020.
- Verner stated that FA will do a further research on sealed lid manhole Memphis #7.

C. Sewer System Model

- Compton stated that when RJN run the model for 10 year 24-hour event, Pump station 3 become a major issue.
- Compton recommended that Basin 3 and 4 are to be smoke test along with the flow monitoring.
- Compton stated that RJN will follow up with the modeler and would response for 2 year 24-hour event with justifications.



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D. WWTF Hydraulic Capacity Assessment

- Verner stated that the 10 year 24-hour event design for the WWTF should be able handle the incoming flow.
- Verner stated that Fisher Arnold will start to Draft for the hydraulic model and have it prior to the effective date.

E. WWTF Recommended Hydraulic Improvement Report

- Verner stated that Fisher Arnold going to start Draft for the hydraulic model and have it prior to the effective date.

F. 2019 Manhole Rehabilitation

- Elhaj stated that ICM (Contractor) are currently working on replacing manhole frames, covers, and frame seals.
- Elhaj stated that ICM has got the Quadax rep. to West Memphis for training for lining manholes with structure guard epoxy.
- Elhaj stated that the project should be complete by the end March 2020.

G. Operation Assessment for 3 Pump Stations

- Verner stated that the draw down test is complete for pump station 3 but would still need further investigation.
- Compton stated that flow meters are currently installed at Basin 3 and 4 and should help with pump station assessment.

H. 2019 Sewer Line Point Repair

- Elhaj stated on January 24, 2020 Chris-hill construction got Mid-south to come and jet the line and run camera from the downstream manhole on maple street and discover the sewer line is in poor condition. Chris-hill construction also discovered new sink hole south from where the point repair work.
- Elhaj stated that West Memphis Utilities and Chris-Hill agreed to move forward and put in a new sewer line using HDD (Horizontal Directional Drilling).

I. Pump Station Number 9 Modifications

- Verner stated that F&A have visited the site and the modifications included crane system and retrofit new pump.
- Verner stated that F&A will have it done within 30 to 40 days.



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J. Wastewater Treatment Plant Expansion Study

- Verner stated that Dr. Moore will have biological draft within two weeks.
- Verner stated that FA will have a draft for the entire WWTP study within the next 30 days.

K. Equalization Basin Rehabilitation

- Verner stated that FA have not started on EQ basin, but the first thing FA is going to re-survey to verify the previous survey that was provided.

L. Avalon street Force Main Extension & Pump Stations Refit

- Verner stated that FA and WMU have visited site and talk about alternatives that would help save construction cost instead of going through Avalon street.
- Verner stated with the alternative option would eliminate pump station # 5 and # 6 from the force main extension.
- Verner stated that FA will do field work around Pump station 11 to verify existing pipe sizes.
- Compton stated that RJN will investigate eliminating Pump station #11 and extending the gravity main.
- Compton stated that RJN will have pump station 3 and 4 in the preliminary report for the force main extension.



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CAP MEETING (March 11, 2020)

Attendees Onsite:

- **W.M.U.C.-** Todd Pedersen, Ward Wimbish, Paul Holloway, AJ Elhaj
- **F&A-** Tim Verner, Jeff Old
- **RJN-** Mac Compton

Project Members:

- **W.M.U.C.-** Todd Pedersen, Ward Wimbish, Paul Holloway, AJ Elhaj
- **F&A-** Tim Verner, Jeff Old.
- **RJN-** Mac Compton, Stephen Jeffus.

The Following Actions that were discussed:

A. Review Meeting Minutes

- Everyone agreed to last meeting notes, and no comments were made.

B. 2019 SSES Study

- Compton stated that RJN have inspected the list of manholes from the city action plan.
- Compton stated that RJN should be complete with CCTV and dye testing by the end of this week.
- Compton stated that RJN will send out the recommendations for manhole rehabilitation.
- Compton stated that RJN will have 2019 preliminary SSES report by the end of April 2020.

C. Sewer System Model

- Compton stated that RJN will design for 2 year 24-hour event for the sewer collection system with justifications.
- Compton stated that RJN are currently flow monitoring at basin 3 and 4 for further investigation. The flow monitoring will be complete within the next month.
- Compton stated that RJN crew have field verified the pipe size at manhole 9C/9A and the pipe size is 33 inches.
- Compton stated that RJN modeler will input 33 inches into the model and see what the model does.
- Verner stated that the model has been updated with the new pumps for pump station 3.



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D. WWTF Hydraulic Capacity Assessment

- Verner stated that FA have completed the WWTF Hydraulic Capacity Assessment.

E. WWTF Recommended Hydraulic Improvement Report

- Verner has pass out Wastewater Treatment Facility Treatment and Hydraulic Expansion Study Draft.

F. 2019 Manhole Rehabilitation

- Elhaj stated that ICM (Contractor) are currently working on replacing manhole frames, covers, and frame seals.
- Elhaj stated that WMU are currently doing manhole inspections for the frame, cover, and frame seal.
- Elhaj stated that the project should be complete by the end of March 2020.

G. Operation Assessment for 3 Pump Stations

- Old stated that FA will have the operation assessment for pump station 3 within the next two weeks.

H. 2019 Sewer Line Point Repair

- Elhaj stated on February 27, 2020 Chris-Hill Construction had got the driller to come out on 7th and Jefferson site to drill two dewatering wells and each well is approximately 60 VF. Each well is pumping approximately 900 GPM.
- Elhaj stated on March 4, 2020 Chris-Hill Construction located the existing 18” corrugated PVC Pipe on 7th and Jefferson site. The contractor has set manhole doghouse in place.
- Elhaj stated on March 5, 2020 Chris-Hill Construction had got the driller to come out on Woods and Jefferson site to drill three dewatering wells and each well is approximately 75 VF. Each well is expected to pump approximately 800 GPM.
- Wimbish stated that Chris-Hill Construction crew will be on West Walnut site beginning of April 2020.

I. Pump Station Number 9 Modifications

- Verner requested that WMU to send any as built drawing for Pump station #9.
- Verner stated that F&A will have it complete within 30 to 40 days.



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J. Wastewater Treatment Plant Expansion Study

- Verner has pass out Wastewater Treatment Facility Treatment and Hydraulic Expansion Study Draft.
- Verner stated that FA will revise the cost based on the detail schematic layout.
- Verner stated that Dr. Moore has visited the wastewater treatment and took several years drainage and flow that Paul Holloway provided and did additional testing and Dr. Moore looked at the existing wastewater treatment process.
- Verner stated that currently three aeration basins and one of them is out of service, Dr. Moore have looked at several options that would easily meet 12 MGD and possibly pass peak of 18 to 20 MGD with the utilization of the EQ basin.
- Verner stated the WWTF expansion includes:
 - i. Setup the aeration in series
 - ii. Build new 4 x 95 feet in diameter Clarifiers
 - iii. New sludge pump station
 - iv. Double the size of the UV system with new facility
- Verner stated in order to make the clarifiers to work parallel, we got to split the inflow, so we are getting the equal flow.

K. Equalization Basin Rehabilitation

- Old stated that FA have started on re-survey to verify the previous survey that was provided.
- Old stated that FA have ran cross section and need to take few more survey shots. Old stated the design for EQ Basin will start soon.

L. Common Force Main Extension & Pump Stations Refit

- Old stated that FA crew are scheduled to survey the site for the common force main.

NEW BUSINESS

- 2020 SANITARY SEWER REHABILITATION



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CAP MEETING (April 8, 2020)

Attendees Onsite:

- W.M.U.C- Todd Pedersen, Ward Wimbish, Paul Holloway, AJ Elhaj, Denise Bosnick

Attendee Conference call:

- F&A- Tim Verner, Jeff Old
- RJN- Mac Compton

Project Members:

- W.M.U.C.- Todd Pedersen, Ward Wimbish, Paul Holloway, AJ Elhaj
- F&A- Tim Verner, Jeff Old.
- RJN- Mac Compton, Stephen Jeffus.

The Following Actions that were discussed:

A. Review Meeting Minutes

- Everyone agreed to last meeting notes, and no comments were made.

B. 2019 SSES Study

- Compton stated that RJN will have the 2019 preliminary SSES report by the end of April 2020.
- Pedersen requested that RJN to investigate the 73,416 GPD inflow for manhole 10BC8.

C. Sewer System Model.

- Compton stated that RJN has sent the technical Memo of Design Strom justification for review.
- Verner stated that the technical memo needs to be in ADEQ's hand by May 25, 2020 for CAO.
- Verner recommends sending the technical Memo along with revised CAP and hydraulic improvement study.

D. WWTF Recommended Hydraulic Improvement Report & Expansion Study

- Verner stated that FA suggested to add a chapter, new chapter 3 after going with Dr. Moore report. Dr. Moore assessment of the existing wastewater treatment plant of the biological treatment capabilities. Chapters 3 will include the hydraulic characteristics of the major components and highlight those that are limited effluent, Clarifiers, and effluent channel.



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- Verner stated that FA will include another chapter of construction consideration for the recommendations.
- Verner stated by the end of next week, FA will have a revised draft with photographs.

E. 2019 Manhole Rehabilitation

- Elhaj stated that West Memphis Utilities is currently doing inspections for manhole frame, cover, and frame seal.
- Elhaj stated that the only bid item left are complete manhole lining and punch list items for this contract. WMU have additional work to for ICM as add on work.

F. Operation Assessment for 3 Pump Stations

- Old stated that FA will have the operation assessment for pump station 3 on April 8, 2020.

G. 2019 Sewer Line Point Repair

- Elhaj stated that Chris Hill Construction have completed the point repair along with new manhole at 7th and Jefferson site.
- Elhaj stated that Chris Hill are working on the Broadway and Avalon sewer sink hole.
- Wimbish stated that Chris Hill will start back working next week on the shoring at West Walnut site.
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H. Pump Station Number 9 Modifications

- Old stated that currently FA are pulling all the drawings together.
- Old stated that FA will need to get their electrical engineers to visit pump station 3, 4, and 9. Old stated that FA will schedule visit with Paul.
- Old stated that FA has a plan worked out which included cleaning out the wet well and cleaning out the suction and discharge pipe and replacing valve for the third pump.
- Verner stated FA will have the drawings within five weeks but will only commit to when they get the final drawings for the electrical aspect of this project.
- Old stated that FA will be potentially bidding in mid-May.



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I. Equalization Basin Rehabilitation

- Old stated they have the Preliminary grading in the pond to establish an elevation.
- Paul requested to have two pump that should pump 5 MGD total for the EQ basin.

J. Common Force Main Extension & Pump Stations Refit

- Old stated based on the elevation FA were good with a 12-inch force main for Pump station 3 to 4 and from pump station 4 force main increase to 14-inch in diameter.
- Old stated that Pump station 3 and 4 will need to be upgraded to be able to push more water.
- Old stated that FA are at the end of surveying which should get them to design within the next week.

K. 2020 SANITARY SEWER REHABILITATION

- Elhaj stated that WMU have spoken with Nelson Taylor with Memphis Machine works in regards the Memphis #7 manhole cover and MMW will provided the self-sealed manhole cover drawings.



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CAP MEETING (May 7, 2020)

Attendees Onsite:

- **W.M.U.C.-** Todd Pedersen, Ward Wimbish, Paul Holloway, AJ Elhaj, Denise Bosnick
- **F&A-** Tim Verner, Jeff Old

Attendee Conference call:

- **RJN-** Mac Compton, Colton Bryant

Project Members:

- **W.M.U.C.-** Todd Pedersen, Ward Wimbish, Paul Holloway, AJ Elhaj
- **F&A-** Tim Verner, Jeff Old.
- **RJN-** Mac Compton, Stephen Jeffus, Colton Bryant.

The Following Actions that were discussed:

A. Review Meeting Minutes

- Everyone agreed to last meeting notes, and no comments were made.

B. 2019 SSES Study

- Elhaj stated that WMU has received the 2019 preliminary SSES report on May 1, 2020.
- Compton stated that based on the SSES study major inflow is due to the vent holes in the manhole cover.
- Compton stated that based on CCTV, it shows the pipe have visible voids and will need CIPP as recommended rehab method.
- Compton stated once WMU reviews the 2019 preliminary SSES report and no comments were made, RJN will send the final SSES report.

C. Sewer System Model

- Pedersen stated that the sewer system model is complete.

D. WWTF Recommended Hydraulic Improvement Report & Expansion Study

- Verner stated that the WWTF Recommended Hydraulic Improvement report and Expansion study was complete on April 24, 2020.
 - i. The WWTF Recommended Hydraulic Improvement report and Expansion study were submitted to ADEQ along with the updated CAP on April 24, 2020 and was approved on April 27, 2020.



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E. 2019 Manhole Rehabilitation

- Elhaj stated that 2019 Manhole Rehabilitation was complete on May 6, 2020.

F. 2019 Sewer Line Point Repair

- Elhaj stated that Chris Hill Construction has completed the repair on Broadway and Avalon site.
- Elhaj stated that Chris Hill Construction will start mobilizing from Broadway and Avalon site to South Woods and Jefferson next week. Chris-Hill will start running the dewatering wells on South Woods and Jefferson this week.
- Elhaj stated that Chris Hill are currently getting the three pit holes ready for the three new manholes on W. Walnut site. Chris-Hill are getting the shoring (Corrugated Liner plate) ready for the HDD contractor.

G. Pump Station Number 9 Modifications

- Old stated that the structural plans are complete and the mechanical plan coming together.
- Old stated that FA got the electrical engineers to visit pump station 3, 4, and 9.
- Old stated that FA will have pump station 9 plans to WMU on May 22, 2020 for review.

H. Equalization Basin Rehabilitation

- Old stated that FA will have Equalization Basin Rehabilitation plans two weeks after the Common Force main plans.

I. Common Force Main Extension & Pump Stations Refit

- Old stated that FA have completed the surveying for the Common Force main on May 07, 2020.
- Old stated that FA will have Common Force main plans two weeks after the pump station 9 plans.
- Pedersen request that FA to provide a detailed schedule for Common Force Main Extension, Equalization Basin Rehabilitation, and Pump Station Number 9 Modifications. The detail schedule would include a review plans, plan revisions, bid phase, and construction phase.

J. 2020 SANITARY SEWER REHABILITATION

- Pedersen stated that WMU will review the 2019 SSES study before WMU move forward.



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CAP MEETING (May 7, 2020)

Attendees Onsite:

- **W.M.U.C.-** Todd Pedersen, Ward Wimbish, Paul Holloway, AJ Elhaj, Denise Bosnick
- **F&A-** Tim Verner, Jeff Old
- **RJN-** Mac Compton, Colton Bryant

Project Members:

- **W.M.U.C.-** Todd Pedersen, Ward Wimbish, Paul Holloway, AJ Elhaj
- **F&A-** Tim Verner, Jeff Old.
- **RJN-** Mac Compton, Stephen Jeffus, Colton Bryant.

The Following Actions that were discussed:

A. Review Meeting Minutes

- Correction on last meeting notes:
 - i. Compton stated that the sewer system model is complete.

B. 2019 SSES Study

- Compton stated that the 2019 SSES Study is complete and the final SSES report will be sent within a week.

C. 2019 Sewer Line Point Repair

- Elhaj stated that Chris Hill Construction got Arrow Bore to do the Close Tolerance Horizontal Directional Drilling and 580 LF of pipe was installed on W. Walnut site.
- Elhaj stated that Chris Hill Construction had got the dewatering driller to drill two additional wells, one is at Maple and West Walnut and the other one is at Vanderbilt and West Walnut. On May 21, 2020, the additional wells are up and running.
- Elhaj stated that Chris Hill Construction has started digging up and locating all the utility on South Woods and Jefferson site on May 20, 2020.
- Elhaj stated that Chris Hill Construction has installed the safety shoring near pump station 7 wet well on May 28, 2020.
- Elhaj stated that Chris Hill Construction have installed the safety shoring around the sewer manhole that is in the middle of S. Woods and Jefferson on June 1, 2020.
- Elhaj stated that Chris Hill Construction has put in the manhole footage and manhole base in the middle of S. Woods and Jefferson.



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D. Pump Station Number 9 Modifications

- Old stated that the plans were revised, and the only thing left is the additional design for the generator port hookup and manual safety switches that was approved on June 10, 2020.
- Old stated the FA will have the additional design within a week.
- Compton stated that RJN will provide that incoming flows for pump station 9 bypass for the pump station 9 rehab project. FA will evaluate the flows for the bypass system.
- Pedersen stated that FA will need to make sure the new pump and VFD will be able to be integrated with the existing controls at pump station 9.
- Verner stated that FA will speak with George with gulf state engineering to make the new pumps will the on the existing SCADA Pack.

E. Equalization Basin Rehabilitation

- Pedersen stated that the Equalization Basin Rehabilitation will be done with the WWTF Modification.

F. Common Force Main Extension & Pump Stations Refit

- Compton stated that RJN is 100% complete with dry weather flow and 85% complete with wet weather flow for 2020 Flow monitoring.
- Compton stated that RJN will have the 2020 Flow monitoring flows by the end of next week and the report will be sent after.
- WMU has received the Common Force main plans on June 05, 2020. WMU and FA will review it after CAP Meeting.

G. 2020 SANITARY SEWER REHABILITATION

- Old stated that FA will start on the 2020 Sanitary Sewer rehab after FA complete Pump Station # 9 Modifications and Common Force Main Extension.

NEW BUSINESS

- WWTF MODIFICATION