

MINUTES
UNIVERSITY AREA JOINT AUTHORITY
1576 SPRING VALLEY ROAD
STATE COLLEGE, PA 16801
Regular Meeting – July 19, 2017

1. Call to Order

Mr. Schmalz, Chairman, called the scheduled meeting of the University Area Joint Authority to order at 4:00 p.m. Wednesday, July 19, 2017. The meeting was held in the Board Room in the office of the Authority with the following in attendance: Messrs. Dempsey, Dietz, Guss, Lapinski, McShea, Nucciarone and Schmalz; Cory Miller, Executive Director, Dave Smith, Assistant Executive Director; Mark Harter, Collection System Superintendent; Jason Brown, Project Manager; Richard Campbell and David Gaines, Solicitor; Ben Burns, Tom Holleran and Jeff Garrigan, Consulting Engineers; Jason Wert and Steve Siegfried, RETTEW; Greg Garthe and Jim May, CRPA; Amy Kerner, State College Borough; David Swisher, PSU; Chris Bamber, PFM; Tom Smida, Mette, Evans and Woodside; Cynthia Hahn, C-NET; Deb Hoag, State College Borough; and Kathy Wheeler, Recording Secretary.

2. Reading of the Minutes

2.1 UAJA Regular Meeting – June 21, 2017

UAJA Meeting Minutes Approved
--

A motion was made by Mr. Lapinski, seconded by Mr. Nucciarone, to approve the minutes of the UAJA meeting held on June 21, 2017. The motion passed unanimously.

3. Public Comment

None.

4. Old Business

4.1 Bank Loan for Refunding of Series 2011A Bonds – Resolution 2017-06

At the June meeting Public Financial Management (PFM), the UAJA financial consultant, presented options for refunding the Series 201A Bonds. The first option to consider is a bank loan. Before going through the process of issuing bonds, bank loan proposals were obtained. Eight bank loan proposals were received. The best quote was from Jersey Shore Bank, with a fixed rate of 1.98% for seven years. PFM believes this option will outperform any possible bond issue. PFM will be present to explain the results.

Refunding 2011A Bond Issue Approved
--

A motion was made by Mr. McShea, seconded by Mr. Lapinski, to approve the quote from Jersey Shore Bank and pass the Resolution 2017-06. The motion passed unanimously.

5. New Business

5.1 C-NET Presentation

Cynthia Hahn, Executive Director of C-NET, explained recent C-NET by-law changes which may present opportunities for UAJA. Following the discussion, the Board directed that a proposal be brought back at the August 2017 meeting.

5.2 Auditing Services

The Authority's professional services contract with Maher Duessel expires with completion of the 2016 audit. Staff solicited a proposal from Maher Duessel to extend the contract. Two

options and pricing for an extension have been included in your packet. This contract is a professional service. Staff has been pleased with the service and product provided the past 3 years.

**Auditing Contract
Approved**

A motion was made by Mr. McShea, seconded by Mr. Lapinski, to approve a five year extension and authorize staff to execute the contract extension with Maher Duessel. The motion passed unanimously.

5.3 Regional Assessment of On-Lot Systems (within and outside the Regional Growth Boundary)

At the June meeting, Jon Dietz (UAJA Board Member) indicated there are large numbers of on-lot sewage disposal systems throughout the Center Region, within the Regional Growth Boundary and outside the Regional Growth Boundary. A number of these are within moderate to high density developments and with known on-lot system failures. Connection of these on-lot systems will: 1) provide a source of nutrient credits for UAJA to comply with the Chesapeake Bay strategy; 2) prevent and protect potable water well supplies from pollution including nitrites/nitrates, pharmaceuticals, and endocrine disruptors; and 3) provide continued and sustainable growth within the Centre Region.

Additional investigation is required to evaluate development (and individual) on-lot systems throughout the Centre Region, locations of UAJA service lines, and the costs to benefits analysis of connection of the various on-lot systems. Gannett Fleming (GeoDecisions) has already conducted the initial analysis of on-lot systems and UAJA staff can provide analysis of feasibility, costs and benefits of connecting various on-lot systems. These efforts will require submittal of a scope and cost proposal by GeoDecisions for the activities.

**Requesting proposal
Approved**

A motion was made by Mr. Lapinski, seconded by Mr. Dempsey, to approve staff to work with Gannett Fleming to obtain a proposal for with the intent of connecting on-lot systems. The motion passed unanimously.

5.4 Greenbriar Development Nutrient Offset Demonstration Project

The Greenbriar Development is located in Ferguson Township within the UAJA sewer service area. This development is not served by UAJA for sewage service, but uses individual home on-lot systems for the 94 developed lots. There would be significant environmental benefits to connecting the Greenbriar Development to the UAJA system including: 1) UAJA will obtain perpetual nutrient offsets for connecting the septic systems; and 2) provide pollutant removal and protection of groundwater within an active pumping area of a SCBWA water supply well, located less than 2,000 feet from the Greenbriar Development. In addition, this would be a demonstration of the on-lot connection approach that will provide an overall model for future UAJA efforts throughout the Centre Region providing: 1) cost to benefit analysis of connections; 2) environmental and potable water benefits to the community; and 3) an evaluation of the approach on sustainable economic growth within the Centre Region.

It is anticipated the effort will require staff effort and board member(s) involvement to communicate the Greenbriar Development Demonstration Project to Ferguson Township for discussion and approval, as well as communicating the effort to other townships for developing a region wide approach. The effort will also require staff time to evaluate costs of the demonstration project for inclusion in 2018 fiscal year or 2017 budget. Future UAJA staff and commitment will be related to construction activities to install service within the Greenbriar Development.

**Greenbriar Connection
Project
Approved**

A motion was made by Mr. Dempsey, seconded by Mr. Guss, to approve staff and board member(s) to initiate efforts for proceeding with the preliminary planning for the connection of Greenbriar. The motion passed unanimously.

5.5 Final Design: The Gates Townhomes (Phase 4)

Final design drawings for The Gates Townhomes, Phase 4 sewer extension (Harris Township) have been received and reviewed by staff and our consulting engineer. The sewer extension will serve 23 EDUs of multi-family homes. The review comments have been addressed.

**Final Design: The
Gates Townhome Ph 4
Approved**

A motion was made by Mr. McShea, seconded by Mr. Lapinski, to approve the Final Design: The Gates Townhomes Phase 4s. The motion passed unanimously.

5.6 Final Design: The Station

Final design drawings for The Station sewer extension (Patton Township) have been received and reviewed by staff and our consulting engineer. The sewer extension will serve 174 EDUs of multi-family homes. The review comments have been addressed.

**Final Design: The
Station
Approved**

A motion was made by Mr. Lapinski, seconded by Mr. Dempsey, to approve the Final Design: The Station. The motion passed unanimously.

5.7 Resolution #2017-07 Lease Agreement to Purchase Doosan Trackhoe

A 2017 Doosan Track hoe has been purchased per the 2017 budget. The budget indicates that we will purchase the Track hoe across 3 years utilizing a lease to own agreement. Resolution 2017-07 authorizes the lease agreement. Both David Gaines, the Authority solicitor, and Tom Smida, the Trustee solicitor have reviewed the agreement.

**Resolution # 2017-07
Approved**

A motion was made by Mr. McShea, seconded by Mr. Dietz, to approve the lease agreement for the purchase of the Doosan Trackhoe. The motion passed unanimously.

5.2 Requisitions

BRIF #276	Ferguson Township Tree replacement-Suburban Park	\$4,200.00
BRIF #277	Gannett Fleming Companies GeoDecisions - GIS	\$799.08
BRIF #278	CRITEX LLC. Mr. Manhole tool	\$25,696.59
BRIF #279	Habitat Forever GD Kissinger riparian maint.	\$1,327.50
BRIF #280	Doing Better Business Copier for Control Building	\$1,092.00
BRIF #281	Doing Better Business	\$2,306.68

Copier Admin Building
Annual Payment 1/3

BRIF # 282	Wells Fargo Vendor Financial 2017 Doosan Excavator Annual Payment 1/3	\$78,685.45
------------	---	-------------

TOTAL BRIF **\$114,107.30**

**Requisitions
Approved**

A motion was made by Mr. Lapinski, seconded by Mr. Guss, to approve the BRIF Requisitions #276-282 The motion passed unanimously.

2017 Construction Fund #14	HRG Odor Control Final Design Through 7/2/2017	\$33,000.00
2017 Construction Fund #15	HRG Reuse Extension to Harris	\$1,080.00
2017 Construction Fund #16	Rettew Associates, Inc. ENR/AWT Final Design	\$9,400.00

TOTAL 2017 CF **\$43,480.00**

**Requisitions
Approved**

A motion was made by Mr. Dietz, seconded by Mr. Lapinski, to approve the 2017 Construction Fund Requisitions #14-16. The motion passed unanimously.

6. Reports of Officers

6.1 Financial Report

Mr. Miller reviewed with the Board the YTD budget report for the period ending June 30, 2017.

6.2 Chairman's Report
None.

6.3 Compost & Septage Operations Report

The following comments are as presented to the Board in the written report prepared by Jason Brown, Project Manager.

COMPOST PRODUCTION AND DISTRIBUTION

	<u>Jan. 2017</u>	<u>Feb. 2017</u>	<u>Mar. 2017</u>	<u>Apr. 2017</u>	<u>May 2017</u>	<u>Jun. 2017</u>
Production	750 cu/yds.	736 cu/yds.	913 cu/yds.	829 cu/yds.	970 cu/yds.	897 cu/yds.
YTD. Production	750 cu/yds.	1,486 cu/yds.	2,399 cu/yds.	3,228 cu/yds.	4,198 cu/yds.	5,095 cu/yds.
Distribution	395	1,092	304	604	569	1,557

	cu/yds.	cu/yds.	cu/yds.	cu/yds.	cu/yds.	cu/yds.
YTD. Distribution	395 cu/yds.	1,487 cu/yds.	1,791 cu/yds.	2,395 cu/yds.	2,964 cu/yds.	4,521 cu/yds.
Immediate Sale	1,345 cu/yds.	974 cu/yds.	1,786 cu/yds.	2,129 cu/yds.	2,399 cu/yds.	1,829 cu/yds.
Currently in Storage	2,095 cu/yds.	1,710 cu/yds.	2,699 cu/yds.	2,958 cu/yds.	3,369 cu/yds.	2,726 cu/yds.

SEPTAGE OPERATIONS

	<u>Jan. 2017</u>	<u>Feb. 2017</u>	<u>Mar. 2017</u>	<u>Apr. 2017</u>	<u>May 2017</u>	<u>Jun. 2017</u>
Res./Comm.	0 gals.	0 gals.	10,300 gals.	4,750 gals.	10,650 gals.	8,000 gals.
CH/Potter	4,878.90 lbs/solids	4,607.85 lbs/solids	7,827.09 lbs/solids	5,746.26 lbs/solids	8,402.55 lbs/solids	4,662.06 lbs/solids
Port Matilda	1,884.84 lbs/solids	1,551.24 lbs/solids	2,568.72 lbs/solids	1,801.44 lbs/solids	1,668.00 lbs/solids	1,584.60 lbs/solids
Huston Twp.	0 lbs/solids	366.96 lbs/solids	483.72 lbs/solids	0 lbs/solids	600.48 lbs/solids	650.52 lbs/solids
Total Flow	55,000 gals.	61,000 gals.	108,800 gals.	72,750 gals.	93,150 gals.	64,500 gals.

6.4 Plant Superintendent's Report

The following comments are as presented to the Board in the revised written report prepared by Art Brant, Plant Superintendent.

Plant Operation

The treatment plant is operating well no exceptions to our NPDES permit. The 12-month rolling average flow for June was 3.87mgd with the average for the month being 4.40mgd. The average monthly influent flow was 5.68mgd. There was a plant inspection with no noted violations this month.

Treatment units on line are as follows: primary clarifiers #3, #5 and #6; aeration basins #2 and #3; secondary; clarifiers' #2, #3, and #4; eight tertiary filters.

Below is the chart for Reuse Distribution and Temperature Data:

	June-17	YTD	Plant Effl. Temp	Wetland Effl. Temp.
Best Western	35,000	168,000		
Centre Hills	6,322,000	13,721,000	June-17	June-17
Cintas	690,000	3,989,000	67.1	66.8
Red Line	336,000	2,027,000		
Uaja Wetland	6,056,000	19,279,000		
Wetland Vault	15,120,000	109,260,000		
Kissingers	1,630,000	8,293,000		
Stewarts	3030	8600		
TOTAL	30,192,570	156,745,600		

Plant Maintenance

- Replaced wear plates in Primary Tanks 1,2,4.
- Replaced the drive chains on Primary Tanks 1 and 4.
- Replaced diaphragm in Primary Pump #8.
- Cleaned earth filter.
- Replaced Auma Control Valve on Train #3.
- Rebuilt three Landia Mixers.
- Installed new sampler at the effluent outfall for the lab.
- Replaced augers in both Knight Mixers.
- Replaced backdrive fan motor on Centrifuge #1.
- Re-installed sign at GDK Wetlands.
- Serviced the Vermeer Trommel Screen.
- Replaced Ambient Ozone Monitor in the AWT Bldg.

6.5 Collection System Superintendent's Report

The following comments are as presented to the Board in the written report prepared by Mark Harter, Collection System Superintendent.

Mainline Maintenance:

New Laterals – (1) – 120 Slab Cabin.

Lateral Repair – (1) – 591 West Hillside Drive.

Mainline Cleaning – (7) manholes inspected – (1122.7 Ft) of mainline cleaned.

Casting Repairs - (16).

Mainline Repairs – (102' of 8" PVC) Radio Park School.

Odor Control Project – 100% complete.

Provided loader and operator to load brush for compost.

Lift Station Maintenance:

Rebuilt check valves at Scott Road stations.

Replaced telemetry board at Scenery station.

Repaired (1) E-One pumps.

Cleaned (4) lift station wet wells.

Replaced high level float at Haymarket station.

NEXT MONTH PROJECTS:

Casting adjustments for Township and Penn Dot Paving projects.

Repair storm water drainage swale at Christopher Lane (above sewer main).

Start Sierra Lane main and lateral replacement.

New lateral at Innovation Park.

Inspection: Final As-Built Approved:

- a. The Gates Phase 3.

Mainline Construction:

- a. Pleasant Point - Started Construction – 40% Complete.
- b. Fieldstone Phase 4 – Started Construction.

New Connections:

a.	Single-Family Residential	8	c.	Commercial	1
b.	Multi-Family Residential	1	d.	Non-Residential	0
					TOTAL
					10

6.6 Engineer's Report

The following comments are as presented to the Board in the written report prepared by the Consulting Engineer.

Retainer

- Assisted staff in the review of submittals (pumps and control panel) for Outer Drive pump station upgrades.

Scott Road Force Main Record Drawings

- Preparation of the Record Drawings is underway.

Odor Control System Upgrades

- DEP has reviewed the supplemental air quality information submitted in response to comments on the Air Quality Plan Approval Application. Based on conversations with the Air Quality Engineer, no stack testing will be required; however, record keeping of process operations must be maintained.
- The 90% design drawings and specifications were presented to staff on June 26th. Project documents have been revised accordingly.
- The internal HRG QA/QC review is complete. The revised documents have been provided to AECOM and BIOREM for review. AECOM has been involved in value engineering throughout the design phase, and BIOREM is the basis of design manufacturer for the biofilter process.
- A final land development submission will be made to College Township once the parcel consolidation is completed to address the Township's comments.
- HRG is prepared to bid the project at the Board's direction. The bidding will be on-line, through the PennBID website.

Special Study for Reclaimed Waterline Extension

- HRG has assisted the Executive Director in the preparation and presentation of this project to the COG Public Services and Environment Committee and the COG General Forum. On June 26th, the General Forum initiated a public comment period to end on August 28th, and to refer the study to the Centre Region municipalities for review. Comments are to be provided to the CRPA, and as of July 11th, no public comments had been received. The next milestone meeting dates are:
 - September 7th – PS&E Committee and CRPC review public and municipal comments and make formal recommendations to the General Forum
 - September 19th – Executive Committee meeting, consideration for inclusion on September General Forum agenda
 - September 25th – General Forum Meeting (for approval of Study for submission to DEP).

Developer Plan Reviews:

- The Design Drawings for the Nursing Home-NVSC Lot 3-2350 Bernel Road (1178.0623) were returned to the Developer on 3/27 with comments for correction. No response has been received as of 7/12.

- The Design Drawings for the West Cherry Lane Multi Use Building (1178.0625) were returned to the Developer for correction on 5/8. The Developer's engineer has commented that this project is on hold.
- Four Developer Plan submissions have been active since the Board report:
 - The Design Drawings for the Benjamin Heights were recommended to Staff for approval on 6/19 (1178.0627).
 - The As-Built Plans for The Gates Townhomes – Phase 3 were recommended to Staff for approval on 6/20 (1178.0629).
 - The Design Drawings for The Station were recommended to Staff for approval on 6/23, revised by the Developer on 7/11, reviewed again and recommended to Staff for approval on 7/13 (1178.0628)
 - The Design Drawings for The Gates Townhomes – Phase 4 were recommended to Staff for approval on 7/3 (1178.0630).

6.7 Construction Report

The following comments were presented to the Board by the Construction Engineer.

General Services

SCADA

- Coordination of SCADA System with Authority Staff and Applied Control Engineering, Inc. (ACE). Working with ACE to complete the remainder of their punchlist, including documentation and licenses.
- Minor troubleshooting of SCADA issues within the facility.

General Operations

- Development of bid specifications for the replacement of the Primary Clarifier Air Compressors
- Development of bid specifications for the replacement of one of the Compost Feed Mixers (Knight Mixer)
- Development of bid specifications for new entrance gate
- Development of bid specifications for replacement of various overhead and garage doors throughout the site

ENR/AWT Upgrade Project

- The Water Quality Management Permit has been approved by the PA DEP with no comments
- The Pilot Testing for the Denitrification Filters has been completed and RETTEW has provided a short summary attached to the report on the results. Overall the Pilot Testing confirmed the operational parameters of the proposed Denitrification Filter design and showed low effluent nitrate levels. Some small optimizations of the design have been noted, including a phosphoric acid addition system for filter commissioning to

improve biomass health and stability.

- Final design activities are underway on multiple facets of the project, primarily on upgrades to long- term equipment replacement and discipline engineering. Examples include replacement of Aeration Power Control Breakers, Aeration VFDs, College-Harris Pump Station VFDs, etc.
- Project is still on target for an advertisement for bids around October 15¹

Solar Project

All major project costs have been bid and received, all approvals and regulatory permits approved and the project is proceeding.

Solar Array

- The final approval of the replat for the property lines was approved the week of July 10th and has been recorded in the Centre County Courthouse. RETTEW staff will be setting the new property corner markers in the coming weeks. This approval was needed to secure the building permit from College Township as the Zoning only allows Solar Arrays as an accessory use. By merging the property for the Solar Array into the WWTP site, it became eligible. This process was started at the end of 2016, and as such, was the last major milestone before construction.
- Bids for the Solar Array were due on June 21st to PACE Energy, LLC and were very close, with two lowest bids separated by only 6%. The bids were very acceptable, reputable installers, and below project estimates. Negotiations between the two lower bidders for installation is occurring.
- Equipment is being purchased and negotiations underway to begin panel racking installation in late August.
- The First Energy/West Penn Power Interconnection Application was approved by the PUC and final approvals by the Local Distribution Company are in draft form. The cost of interconnection was significantly lower than the BESS and lower than project estimates.

Solar Array

- The Battery Energy Storage System (BESS) agreements for the Wholesale Market were registered on May 15, 2017.
- Bids and all approvals have been received on the BESS system and construction has been authorized. The Batteries/Container and Inverter have all been ordered and moving into production. Site work will begin in August and is awaiting First Energy/WPP to set the interconnection pole.

6.8 Executive Director's Report

The following comments are as presented to the Board in the written report prepared by Cory Miller, Executive Director.

Tom Songer Memo

Mr. Miller presented a memo from Tom Songer Act 537 Plan Update, UAJA User Fees and Tapping Fees and the Expansion of the Beneficial Reuse.

Reuse Water Extension to Harris Township

College Township Water Authority wants to include a rate meeting in the agreement to ensure what dollar amounts they can receive.

Source Water Testing

No results have been received.

7. Other Business

None

8. Adjournment

The meeting was adjourned at 5:55 p.m.

Respectfully submitted,

UNIVERSITY AREA JOINT AUTHORITY

B. A. Denney

Secretary/Assistant Secretary