



# CITY OF HOT SPRINGS

Utilities Department

780 Adams Street

Hot Springs, Arkansas 71901

June 10, 2022

VIA Email

Leslie Allen-Daniel  
Enforcement Analyst – Water Division  
Arkansas Energy & Environment – Environmental Quality  
5301 Northshore Drive  
North Little Rock, AR 72118-5317

**RE: City of Hot Springs Utilities  
Permit No. AR0033880 / AFIN 26-00145 / CAO LIS 22-007  
Progress Report and SECAP Delivery**

Dear Ms. Allen-Daniel,

The following components are a brief synopsis of progress regarding the CAO.

Hawkins-Weir Engineers, Inc. has the contract for the Spring Street Collection System Improvements project. The project is funded by the 2020 Wastewater Bond.

Spring Street Collection System Improvements – Hawkins=Weir Engineers			
Item No.	Begin	End	Description
1	3/22/22	09/25/22	Design Phase Services – Ongoing Plan and Profile Sheets being developed
2	3/30/22	Complete	Survey – Crist has completed all aerial mapping as well as locating all existing sewer manholes. They are in the process of beginning the topographic and boundary portion of the survey. Permit obtained from Hot Springs National Park for surveying manholes and services throughout the Gorge Campground.
3	9/25/22	10/25/22	Bidding and Negotiation Services
4	10/26/22	12/31/23	Construction Services

The RJN Group, Inc. has the contract for the Lower Gulpha Gravity Interceptor from Spring Street to the Gulpha Pump Station. The project is funded by the 2020 Wastewater Bond. No changes.

Lower Gulpha Interceptor – RJN Group			
Item No.	Begin	End	Description
1	3/22/22	9/16/22	Conceptual Design Report Draft (anticipated schedule)
2	3/22/22	9/16/22	30% Plan Submittal (anticipated schedule)
3	3/22/22	1/21/23	Conceptual Design Report Final (anticipated schedule)
4	3/22/22	1/21/23	60% Plan Submittal (anticipated schedule)
Sub Consultants			
5	3/22/22	Ongoing	Crist Survey – Crist has completed aerial mapping survey. They are processing and performing an internal QA/QC before releasing to RJN. Crist has initiated setting control points along the route and location of property corners but are yet to begin data collection on the topographic survey.
6	3/22/22	Ongoing	Ace Pipe – Multi-Sensor Inspection currently completing field work.
7	3/22/22	Ongoing	Eco – Environmental: completed initial site visit and provided photos of existing creek crossings.
8	4/29/22	N/A	Grubbs – Geotech - RJN anticipates giving notice to proceed for initial 15 geotech investigations.

Crist Engineers, Inc. has the contract for the Gulpha Pump Station Improvements. The project is funded by the 2020 Wastewater Bond.

Gulpha Pump Station Improvements – Crist Engineers			
Item No.	Begin	End	Description
1	3/22/22	Ongoing	Engagement of professional services with Crist Engineers
2	3/22/22	4/8/22	On site survey on the pump station site, planimetrics, surface features, and contour development
3	3/22/22	Ongoing	Commenced initial hydraulic evaluation of pump alternatives for pump station site. Acceptable pump manufacturers are Cornell, Fairbanks and Flygt.
4	3/22/22	Ongoing	Design Phase Services – Meeting next week to coordinate with Gulpha Force Main Consulting Engineer, Hanson & McLaughlin, LLC
5	3/1/23	5/1/23	Bidding and Negotiation Services
6	5/1/23	9/1/24	Construction Phase Services

Hanson & McLaughlin, LLC is working on the Gulpha Force Main from the Gulpha Pump Station to the Davidson Drive Wastewater Treatment Plant. The project will be bid this year. The project is funded by the 2020 Wastewater Bond. Updated schedule.

Gulpha Force Main – Hanson McLaughlin			
Item No.	Begin	End	Description
1	3/15/22	12/31/23	Gulpha 36-Inch Force Main contract signed
2	3/15/22	Ongoing	Surveying and geotechnical engineering proposals received
3	3/15/22	4/7/22	Route adjustments to original FM route
4	3/15/22	4/7/22	Route FM to Davidson WWTP
5	4/7/22	Ongoing	Easement exhibits submitted to City for City to acquire required easements
6	4/8/22	Ongoing	Plan / profile sheet preparation
7	4/8/22	Ongoing	Project Manual (specifications) preparation
8	4/15/22	6/16/2022	30% Plan Submittal (Complete) – Meeting next week to review
9	6/1/22	7/31/22	60% Plan Submittal
10	8/1/22	11/30/22	100% Plan Submittal
11	12/1/22	3/31/23	Bid Phase/Procurement Services
12	4/1/23	12/31/23	Construction Phase Services

Should you need further information, please contact me at (501)651-7730 or by email at [mledbetter@cityhs.net](mailto:mledbetter@cityhs.net).

Sincerely,

Monty Ledbetter  
Utilities Director

Attachment: Water Quality Assessment Results- MH 1750 - December, 2021 through April, 2022

cc: City of Hot Springs - Bill Burrough, City Manager; Denny McPhate, Deputy City Manager; Harold Mauldin, Wastewater Facilities Operations Manager; Todd Piller, Capital Project Manager; Consultants - Karl Hanson, Hanson McLaughlin; Chris Leathers, RJN Group; Craig Johnson, Crist Engineers



# Water Quality Assessment Results- MH 1750 - SSO May 5, 2022

## Water Quality Assessment (WQA)

Month: May

Overflow date: 5/5/22-5/6/22

Sample Date: 5/6/22

	Overflow Location		
	Site 1	Upstream Site 2	Downstream Site 3
pH SU	7.25	7.1	7.21
Temperature C	18.6	18.5	20
DO ppm	9.21	9.32	8.87
Conductivity uS/cm	43.56	42.33	43.7
Turbidity NTU	9.84	11.3	13
Alkalinity mg/L	2	4	4
BOD mg/L	1.02	0.48	0.62
TSS mg/L	3.1	3.4	5.9
Ammonia mg/L	0.02	0.01	0.03
Total Phosphorus mg/L	0.04	0.04	0.01
Ortho-phosphate mg/L	0.02	0.01	0.03
Sulfate mg/L	14.5	15.3	15.2
TDS mg/L	33	34	32
Chloride mg/L	2.6	2.5	2.6
Nitrate/Nitrite mg/L	<0.5	<0.5	<0.5
TKN mg/L	<0.5	<0.5	0.66
Chlophyll A mg/L	<0.0050	<0.0050	<0.0050
Fecal Coliforms/100ml	0	37.5	6.25
E. Coli cfu/100ml	172.6	178.9	285.1

## E-coli Testing Criteria <126cfu's

Sample Date: 5/9/22

Sample Date: 5/10/22

Site #	Sample Date: 5/9/22		Site #	Sample Date: 5/10/22	
	Fecal Coliform	E. Coli		Fecal Coliform	E. Coli
2	68.75	52.8	2	181.25	78
3	81.25	55.6	3	187.5	103.6
4	43.75	38.3	4	37.5	9.8
5	56.25	24.3	5	6.25	2

Sample Date:

Sample Date:

Site #	Sample Date:		Site #	Sample Date:	
	Fecal Coliform	E. Coli		Fecal Coliform	E. Coli
2			2		
3			3		
4			4		
5			5		

# Water Quality Assessment Results- MH 1750 - SSO May 23, 2022

Sample Date: 5/24/22

	Overflow Location		
	Site 1	Upstream Site 2	Downstream Site 3
pH SU	7.12	7.25	7.21
Temperature C	18.9	18.8	19
DO ppm	8.49	9.26	7.94
Conductivity uS/cm	66.7	65.83	69.07
Turbidity NTU	5.32	8.82	9.66
Alkalinity mg/L	15	15	15
BOD mg/L	0.29	0.45	0.57
TSS mg/L	3.3	8	6.6
Ammonia mg/L	0.01	0.01	0.04
Total Phosphorus mg/L	0.01	0.01	0.01
Ortho-phosphate mg/L	0.03	0.06	0.08
Sulfate mg/L	15	14.6	15.4
TDS mg/L	63	51	55
Chloride mg/L	3.3	3	3.3
Nitrate/Nitrite mg/L	<0.5	<0.5	<0.5
TKN mg/L	0.86	0.72	0.91
Chlophyll A mg/L	<0.005	<0.005	<0.005
Fecal Coliforms/100ml	0	0	0
E. Coli cfu/100ml	135.4	178.5	328.2

## E-coli Testing Criteria <126cfu's

Sample Date: 5/31/22		Sample Date: 6/3/22	
Fecal Coliform	E. Coli	Fecal Coliform	E. Coli
Site #		Site #	
2	100	2	150
3	81.25	3	118.75
4	12.5	4	106.25
5	12.5	5	12.5

Sample Date: 6/7/22		Sample Date:	
Fecal Coliform	E. Coli	Fecal Coliform	E. Coli
Site #		Site #	
2	56.25	2	
3	143.75	3	
4	206.25	4	
5	6.25	5	

# Water Quality Assessment Results- MH 1750 - SSO May 25, 2022

Sample Date: 5/26/22

	Overflow Location		
	Site 1	Upstream Site 2	Downstream Site 3
pH SU	7.1	7.03	6.84
Temperature C	17.6	17.4	17.5
DO ppm	9.29	9.62	8.91
Conductivity uS/cm	50.77	50.46	51.75
Turbidity NTU	12.9	13.6	18
Alkalinity mg/L	15	15	15
BOD mg/L	0.5	0.45	0.55
TSS mg/L	5.1	21.1	9.2
Ammonia mg/L	0.01	0.02	0.03
Total Phosphorus mg/L	0.07	0.08	0.03
Ortho-phosphate mg/L	0.05	0.07	0.08
Sulfate mg/L	15.3	15.5	17
TDS mg/L	48	47	57
Chloride mg/L	2.5	2.5	2.5
Nitrate/Nitrite mg/L	1.7	<0.5	<0.5
TKN mg/L	1.2	1	1.1
Chlophyll A mg/L	<0.005	<0.005	<0.005
Fecal Coliforms/100ml	0	0	0
E. Coli cfu/100ml	238.2	235.9	272.3

E-coli Testing Criteria <126cfu's					
Sample Date:			Sample Date:		
Fecal Coliform		E. Coli	Fecal Coliform		E. Coli
Site #			Site #		
2	100	161.6	2	150	46.9
3	81.25	79.4	3	118.75	190.4
4	12.5	9.6	4	106.25	88.9
5	12.5	5.2	5	12.5	10.4

Sample Date: 6/7/22					
Fecal Coliform		E. Coli	Fecal Coliform		E. Coli
Site #			Site #		
2	56.25	39.3	2		
3	143.75	104.3	3		
4	206.25	89.2	4		
5	6.25	1	5		

## Water Quality Assessment Results- MH 1750 - Average for May 2022

	Overflow Location		
	Site 1	Upstream Site 2	Downstream Site 3
pH SU	7.16	7.13	7.09
Temperature C	18.37	18.23	18.83
DO ppm	9	9.4	8.57
Conductivity uS/cm	53.68	52.87	54.84
Turbidity NTU	9.35	11.24	13.55
Alkalinity mg/L	10.67	11.33	11.33
BOD mg/L	0.6	0.46	0.58
TSS mg/L	3.83	10.83	7.23
Ammonia mg/L	0.01	0.01	0.03
Total Phosphorus mg/L	0.04	0.04	0.02
Ortho-phosphate mg/L	0.03	0.05	0.06
Sulfate mg/L	14.93	15.13	15.87
TDS mg/L	48	44	48
Chloride mg/L	2.8	2.67	2.8
Nitrate/Nitrite mg/L	0.9	<0.5	<0.5
TKN mg/L	0.85	0.74	0.89
Chlophyll A mg/L	<0.005	<0.005	<0.005
Fecal Coliforms/100ml	0	37.5	6.25
E. Coli cfu/100ml	182.07	197.77	295.2

## Water Quality Assessment Results- MH 1750

### Averages December 2021 through May 2022

	Overflow Location		
	Site 1	Upstream Site 2	Downstream Site 3
pH SU	7.05	7.03	6.97
Temperature C	13.13	12.96	13.06
DO ppm	10.2	10.44	9.98
Conductivity uS/cm	54.48	53.38	61.04
Turbidity NTU	11.81	12.99	14.58
Alkalinity mg/L	9.75	8.18	10.18
BOD mg/L	1.18	1.17	1.44
TSS mg/L	3.83	7.22	5.41
Ammonia mg/L	0.01	0.01	0.03
Total Phosphorus mg/L	0.05	0.04	0.04
Ortho-phosphate mg/L	0.03	0.03	0.05
Sulfate mg/L	15.8	16.13	17.45
TDS mg/L	45.75	43.5	50.83
Chloride mg/L	3.13	3.11	3.36
Nitrate/Nitrite mg/L	<0.92	<0.56	<0.52
TKN mg/L	<0.94	<0.71	<0.81
Chlophyll A mg/L	<.006	<0.065	<.005
Fecal Coliforms/100ml	51.27	64.32	67.21