



PROPOSED CHANGE ORDER REQUEST

Department of Watershed Management

Contract Name: Snapfinger Advanced Wastewater Treatment Facilities Expansion - Phase 2 Date: 4/16/2020
 Contractor: Archer Western Construction, LLC
 Contract Number: 972548 Contract Amendment Number: 9
 Contract Amendment Category: Cost Schedule Scope Deliverables

Original Contract \$ Amount:	Contract Start Date:	Original Contract Days:(TERM)	Original Contract End Date:
\$187,869,380.00	8/5/2015	1669	2/29/2020

NTP Start Date:	Original Performance Days:(TIME)	Original Performance End Date:
8/26/2015	1640	2/21/2020

Previous Change Order:	Previous Time Extensions Days:	Previous Changes to \$ Amount:
Change Order No. 1:	0	\$350,797.46
Change Order No. 2:	0	\$599,549.04
Change Order No. 3:	90	\$0.00
Change Order No. 4:	120	\$1,650,000.00
Change Order No. 5:	0	\$465,000.00
Change Order No. 6:	0	\$106,519.11
Change Order No. 7:	0	\$271,526.74
Change Order No. 8:	0	\$1,000,000.00

Current Contract Amount:	Current Performance Days:	Current Performance End Date:
\$192,312,772.35	1850	9/18/2020

Description of Proposed Changes: See "Justification of Proposed Changes" section of this form; additional details attached (detailed cost summary, Construction Manager comments). Six (6) PCOs are the result of "errors and omissions". As noted in the contract terms, "the Engineer shall be responsible for the accuracy of the work and any error/omission made by the Engineer in any phase of the work" Near the end of construction, the cumulative value of PCO's identified as potentially resulting from design errors or omissions will be evaluated to determine whether or not DeKalb County pursues reimbursement from the Engineer. If reimbursement is pursued, it is intended that each PCO will be individually negotiated with the Engineer.

Justification of Proposed Changes:
 The referenced project is approximately 72% complete. To date a large amount of design and construction changes have been necessary to accommodate design modifications, varying subsurface utilities and construction issues. In an effort to mitigate cost and delay impacts to the project, one hundred and seventy-five (175) Field Orders have been executed to date. To further assist the Owner with management and corresponding contract adjustments for these types of changes, nine (9) Proposed Change Orders (PCO) are requested for your consideration:
1. PCO#259 - MBR Bracing Revision - RFIs #948, #951 and #951.1 revised the X-bracing detail at the MBR stairway #9 door opening to resolve location and elevation conflicts. This PCO is due to "Design Errors and Omissions".

- 2. PCO#261 Rev. 1 (Part A) - TSL Piping Modifications at Existing Dewater** - Since the existing 10-inch isolation valve was discovered not to have been installed per the as-built drawings, a new valve will need to be cut into the existing 10" - TSL line in the Existing Dewatering Building. This PCO is due to "Unforeseen Conditions".
- 3. PCO#262 - MBR Stairways #9 & #10 Modifications** - The Engineer's response to RFI#978 added a 2-hour rated shaftwall ceiling which is not shown in the original drawings. This PCO is due to "Design Errors and Omissions".
- 4. PCO#263 - 8" WAS Unsuitable Materials** - Existing organic materials and rubbish were discovered below the 8" WAS pipeline trench excavation. These unsuitable materials were removed and disposed, then replaced with suitable fill material to support the new 8" WAS pipeline. This PCO is due to "Unforeseen Conditions".
- 5. PCO#268 - Fan Motor Changes at Headworks** - The airflow criteria for the Headworks Building's exhaust and supply fans were revised per the Engineer's response to RFI 996. The fan motors required replacement to meet the revised airflow criteria. This PCO is due to "Design Errors and Omissions".
- 6. PCO#273 - MBR Static Mixers SHS Sizes** - The EOR's response to RFI#1019 corrects the injection nozzle connection sizes for the 14-in and 19-in static mixers. Field modifications to the mixers and connecting piping were required to accommodate the revised connection sizes. This PCO is due to "Design Errors and Omissions".
- 7. PCO#275 - Architectural Clarifications (DCN#28 Rev2)** - Architectural design modifications (issued in Design Clarification Notice #28Rev2) by the Engineer of Record to provide fireproofing in the elevator hoistway to comply with NFPA 101 Life Safety Code requirements and other structural design clarifications for the elevator hoistway roof at the Administration Building. This PCO is due to "Design Errors and Omissions".
- 8. PCO#284 - Dewatering Bldg Slab Opening Covers** - The Dewatering Building centrifuge and conveyor equipment require multiple floor openings for discharge of dewatered solid materials. RFI No. 1065 includes provision of covers at each floor opening for plant personnel safety while performing routine maintenance in these areas. Protective floor opening covers were not included in the original design, but are required to prevent fall hazards during operation and maintenance of this facility. This PCO is due to "Design Errors and Omissions".
- 9. PCO#287 - Polymer Flow Meter** - DCN No. 29 was issued by the EOR per DeKalb County operation personnel request for provision of flow meter(s) to measure polymer flow to each centrifuge while performing sludge dewatering operations. Polymer flow measurement will enable real time monitoring of polymer flow rates, adjustment and totalization of polymer dosage volume(s) to each centrifuge throughout each operating cycle. This PCO is due to a requested process modification.

Proposed Additional Performance Days:	Proposed Cumulative Performance Days:	Proposed Performance End Date:	Proposed Contract End Date:
0	0	NA	NA
Proposed Changes to Dollar Amount:	Proposed Cumulative Contract Amount:	Amount Spent To Date as of (4/16/2020):	
\$225,345.72	\$192,538,118.07	\$141,532,761.27	

Describe Any Risk Associated With This Change:
None

Effect of NOT Approving This Change:
The PCO listed herein is necessary to construct Phase 2 of the Snapfinger Advanced Wastewater Treatment Facility. The effect of not approving this change will result in delayed construction completion, additional claims from the Contractor for additional costs and time extension(s) due to excusable delay(s). Note - DeKalb County has the option to seek recovery of additional construction costs due to design errors and omissions.

Engineering Manager's Approval:

- Accepted
- Rejected

Signature: F. Keith Lagualla Digitally signed by F. Keith Lagualla
Date: 2020.04.17 11:02:58 -0400

Print Name: _____

Date: _____

Watershed Director's Approval:

- Accepted
- Rejected

Signature: Reginald Wells Digitally signed by Reginald Wells
Date: 2020.04.17 11:02:58 -0400

Print Name: Reginald Wells

Date: 4/17/2020

Deputy Chief Operating Officer's Approval:

- Accepted
- Rejected

Signature: *[Handwritten Signature]*

Print Name: TJ Rhinhart

Date: 4/22/2020

Chief Operating Officer's Approval:

- Accepted
- Rejected

Signature: *[Handwritten Signature]*

Print Name: Zachary L. Williams

Date: 4/23/2020

Contract Name: Snapfinger Advanced Wastewater Treatment Facilities Expansion - Phase 2

Contractor: Archer Western Construction, LLC

Contract Number: 972548

Contract Amendment Number: 9

Exhibit 'A'

Archer Western Construction - Contract No. 972548

Snapfinger Advanced Wastewater Treatment Facilities Expansion Phase 2

Potential Change Order Pkg No. 9

Item No.	DESCRIPTION	Total Cost Labor (AWC)	Total Cost Material	Total Cost Equipment	Total Cost Subcontractor	Mark-up, Tax, Burden, Bond, Insurance	Other Direct Costs	Total PCO Cost
1	PCO#259 - MBR Bracing Revision RFIs #948, #951 and #951.1 revised the X-bracing detail at the MBR stairway #9 door opening to resolve location and elevation conflicts. This PCO is due to "Design Errors and Omissions".	\$ -	\$ -	\$ -	\$ 4,975.00	\$ 832.07	\$ -	\$ 5,807.07
2	PCO#261 Rev. 1 (Part A) - TSL Piping Modifications at Existing Dewater Since the existing 10-inch isolation valve was discovered not to have been installed per the as-built drawings, a new valve will need to be cut into the existing 10"- TSL line in the Existing Dewatering Building. This PCO is due to "Unforeseen Conditions".	\$ 2,824.75	\$ 3,451.00	\$ -	\$ 4,522.60	\$ 3,689.11	\$ -	\$ 14,487.46
3	PCO#262 - MBR Stairways #9 & #10 Modifications The Engineer's response to RFI#978 added a 2-hour rated shaftwall ceiling which is not shown in the original drawings. This PCO is due to "Design Errors and Omissions".	\$ 669.00	\$ 1,103.52	\$ -	\$ 15,021.64	\$ 3,211.35	\$ -	\$ 20,005.51
4	PCO#263 - 8" WAS Unsuitable Materials Existing organic materials and rubbish were discovered below the 8" WAS pipeline trench excavation. These unsuitable materials were removed and disposed, then replaced with suitable fill material to support the new 8" WAS pipeline. This PCO is due to "Unforeseen Conditions".	\$ 1,803.10	\$ 144.25	\$ 747.84	\$ 793.24	\$ 1,437.09	\$ -	\$ 4,925.52
5	PCO#268 - Fan Motor Changes at Headworks The airflow criteria for the Headworks Building's exhaust and supply fans were revised per the Engineer's response to RFI 996. The fan motors required replacement to meet the revised airflow criteria. This PCO is due to "Design Errors and Omissions".	\$ 273.00	\$ -	\$ -	\$ 1,742.03	\$ 491.75	\$ -	\$ 2,506.78
6	PCO#273 - MBR Static Mixers SIIS Sizes The Engineer's response to RFI#1019 corrects the injection nozzle connection sizes for the 14-in and 19-in static mixers. Field modifications to the mixers and connecting piping were required to accommodate the revised connection sizes. This PCO is due to "Design Errors and Omissions".	\$ 3,056.20	\$ 3,849.50	\$ -	\$ -	\$ 2,896.45	\$ (802.15)	\$ 9,000.00
7	PCO#275 - Architectural Clarifications (DCN#28 Rev2) Architectural design modifications (issued in Design Clarification Notice #28Rev2) by the Engineer of Record to provide fireproofing in the elevator hoistway to comply with NFPA 101 Life Safety Code requirements and other structural design clarifications for the elevator hoistway roof at the Administration Building. This PCO is due to "Design Errors and Omissions".	\$ 4,645.00	\$ 2,549.10	\$ 2,780.72	\$ 42,579.00	\$ 11,166.66	\$ -	\$ 63,720.48

Exhibit 'A'

Item No.	DESCRIPTION	Total Cost Labor (AWC)	Total Cost Material	Total Cost Equipment	Total Cost Subcontractor	Mark-up, Tax, Burden, Bond, Insurance	Other Direct Costs	Total PCO Cost
8	PCO#284 - Dewatering Bldg Slab Opening Covers The Dewatering Building centrifuge and conveyor equipment require multiple floor openings for discharge of dewatered solid materials. RFI No. 1065 includes provision of covers at each floor opening for plant personnel safety while performing routine maintenance in these areas. Protective floor opening covers were not included in the original design, but are required to prevent fall hazards during operation and maintenance of this facility. This PCO is due to "Design Errors and Omissions"*.	\$ 4,890.00	\$ 13,016.59	\$ -	\$ -	\$ 6,893.41	\$ -	\$ 24,800.00
9	PCO#287 - Polymer Flow Meter DCN No. 29 was issued by the EOR per Dekalb County operation personnel request for provision of flow meter(s) to measure polymer flow to each centrifuge while performing sludge dewatering operations. Polymer flow measurement will enable real time monitoring of polymer flow rates, adjustment and totalization of polymer dosage volume(s) to each centrifuge throughout each operating cycle. This PCO is due to a requested process modification.	\$ 5,605.00	\$ 19,188.57	\$ -	\$ 40,237.98	\$ 15,061.35	\$ -	\$ 80,092.90
PACKAGE TOTAL								\$ 225,345.72

**As noted in the contract terms, "the Engineer shall be responsible for the accuracy of the work and any error/omission made by the Engineer in any phase of the work" Near the end of construction, the cumulative value of PCO's identified as potentially resulting from design errors or omissions will be evaluated to determine whether or not DeKalb County pursues reimbursement from the Engineer. If reimbursement is pursued, it is intended that each PCO will be individually negotiated with the Engineer.*