

Contract Change Order # 5

Project Name:	LLWWTP Headworks Improvements	Project Number:	165420/165423
Project Location:	Lynn Lane Waste Water Treatment Plant	Date of Application:	Monday, April 29, 2019
Contractor:	Crossland Heavy Contractors	Submitted By:	Jason Smith

Summary of Change in Scope of Work

The following scope of work consisting of work location, work description, established quantities, and timeline for completion has been reviewed and agreed upon by the contractor, the origin funding department, and the Engineering and Construction Department.

Change of Work Items Included in this Change Order:

- Per request of Utilities and Engineering staff, as well as noted within RFI #61, the contractor is to extend the newly proposed 2" poly pipe gas line per the attached plan. The original plans show the new ONG meter directly east of the new headworks building; whereas the final location of the ONG gas line shall be located at the entrance to the facility. From the plan noted meter location to the actual location of the ONG meter shall be the basis of this change in scope. The below costs proposal is an all inclusive lump sum price to provide a complete in place product for the above noted scope and installed per the attached plans, specs, and RFI's.

Change in Contractual Project Time:

- 1) This work will not effect the critical path or substantial completion of the original project and thus no additional time is required.

Plan Sheets or Additional Documents Attached: ☒ Yes ☐ No ☒ Other: Project Plans, CHC Cost Proposal, To Date Costs

Work Order Quantities

Item#	(Spec)	Item Description	Units	Price	Quantity	Total Amount
CO5-1	NA	Onsite Gas Line Extention	LS	\$ 62,511.74	1	\$ 62,511.74
Total Change Cost:						\$ 62,511.74

Summary of Project Costs

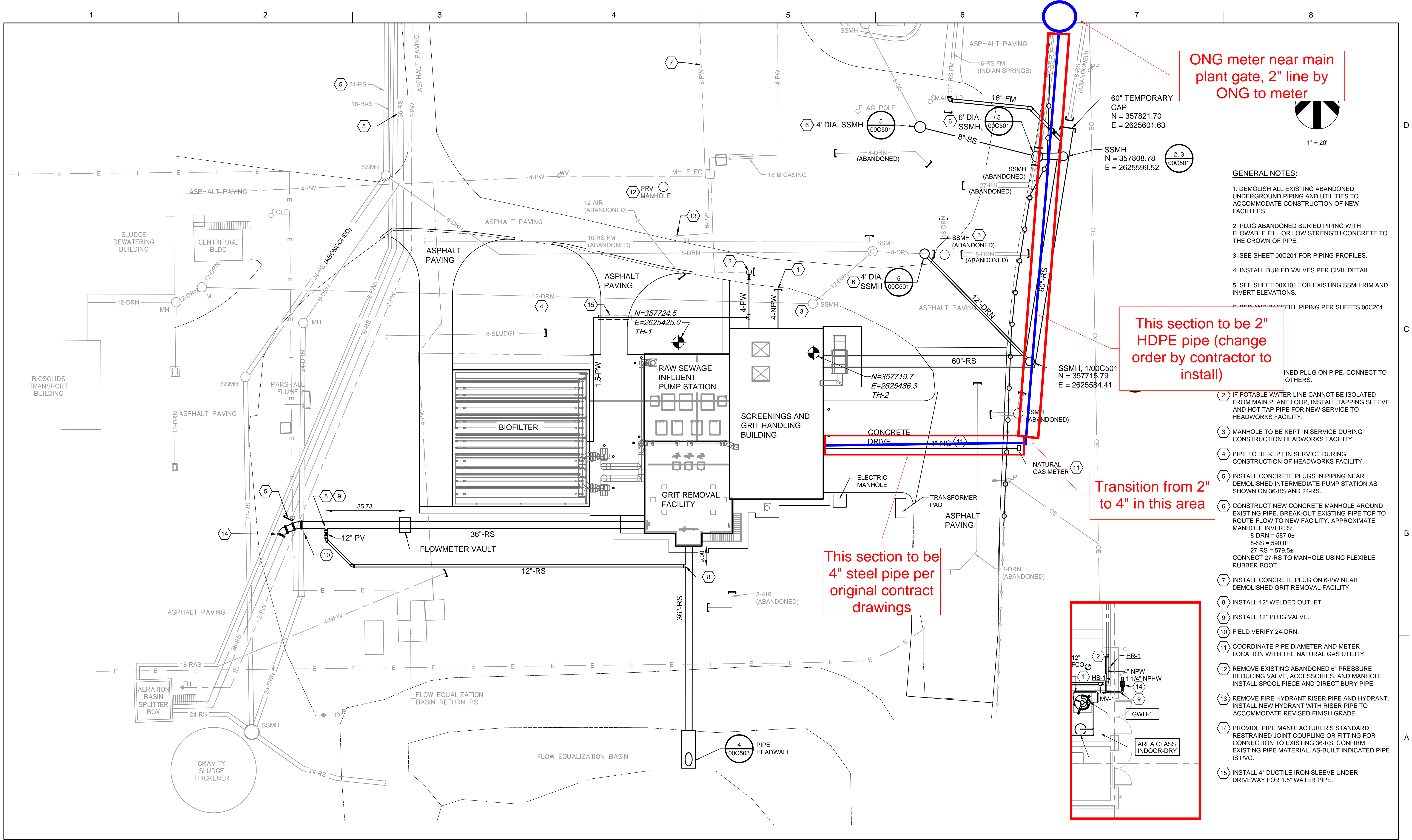
Total Previous Change Orders:	\$ 738,817.03	Original Contract Amount:	\$ 9,772,200.00
Current Change Order:	\$ 62,511.74	Amended Contract Amount:	\$ 10,573,528.77
Total Cost of Change Orders:	\$ 801,328.77	Percent Change in Contract:	8.20%
Total Cost Applicable to CBA:	\$ 801,328.77	Percent Change Applicable to CBA:	8.20%

Change Order Authorization

Change Order #	5	in the sum of:	\$ 62,511.74	has been reviewed by all parties and is recommended for approval by:
Contractor Submitting Change Order:				
	Name	Signature	Date	
Construction Division Manager:	Timothy S Robins, PE			
	Name	Signature	Date	
Director of Engineering & Construction:	Alex Mills, PE			
	Name	Signature	Date	
Assistant City Manager - Operations:	Kenneth D Schwab, PE			
	Name	Signature	Date	
City Manager:	Michael Spurgeon			
	Name	Signature	Date	

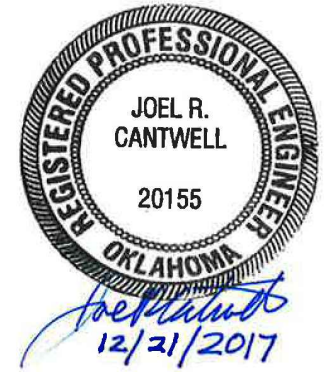
This Change is Executed Through:

- ☐ This change to the contract documents is authorized by the City Manager's authority in accordance with the applicable state statutes and COBA Code of Ordinances.
or
☒ This change to the contract documents was approved at the City Council/BAMA meeting held on : Tuesday, May 7, 2019



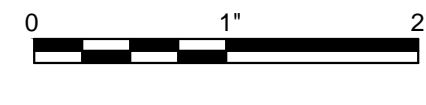
ISSUE	DATE	DESCRIPTION
0	12/21/2017	ISSUED FOR CONSTRUCTION

PROJECT MANAGER	JOEL R. CANTWELL
CIVIL	T. TOWNSEND
STRUCTURAL	S. LOEFFLER
ARCHITECTURAL	K. REEVE
PROCESS	T. TOWNSEND
MECHANICAL	B. PERLBERG
PLUMBING	B. PERLBERG
ELECTRICAL	D. BESINGER
PROJECT NUMBER	10026444



**BROKEN ARROW
MUNICIPAL AUTHORITY
CITY OF BROKEN ARROW, OK**

**LYNN LANE WWTP
HEADWORKS IMPROVEMENTS**



**GENERAL
CIVIL
YARD PIPING PLAN HEADWORKS AREA**

FILENAME | 00C104.dwg
SCALE | 1" = 20'
SHEET | **00C104**

COST BREAKDOWN FOR SUPPORT OF ALLOWANCE AUTHORIZATION NO. 17

Reference Document: Directive from City of Broken Arrow

Contract No.: Project Number 165420 & 165423
 Project No.: Lynn Lane Headworks Improvements
 Contractor: Crossland Heavy Contractors, Inc.

Date: 03/18/19

Description of Work: Additional gas line to owner supplied meter.

Materials:

Items	Units	Cost	Quantity	Amount
		\$0.00	0.00	\$0.00
		\$0.00	0.00	\$0.00
		\$0.00	0.00	\$0.00
		\$0.00	0.00	\$0.00
			Sub-Total	\$0.00
			Total	\$0.00

Labor:

Job Title	Rate/Hr.	Total Hrs.	Amount	
	\$0.00	0.00	\$0.00	
	\$0.00	0.00	\$0.00	
	\$0.00	0.00	\$0.00	
			Sub-Total	\$0.00
			Total	\$0.00

Payroll Additives:

Item	% of Labor	Amount
Insurance	8.00%	\$0.00
Bond	0.00%	\$0.00
Social Security	7.65%	\$0.00
Taxes	3.80%	\$0.00
Worker's Compensation	22.00%	\$0.00
Employee Fringe Benefits	20.00%	\$0.00
Total		\$0.00

Equipment:

Type	Cost/Hr.	Total Hrs.	Amount
	\$0.00	0.00	\$0.00
	\$0.00	0.00	\$0.00
	\$0.00	0.00	\$0.00
	\$0.00	0.00	\$0.00
			\$0.00
		Total	\$0.00

Sub-Contractor Cost - Gearbox Repair & Freight	\$56,828.85
Mark-up On Sub-Contractor (10%)	\$5,682.89
Contractor Cost	\$62,511.74
Contractor Profit	\$0.00
Contractor Total	\$62,511.74

Total Lump Sum Cost for Work Described	\$62,511.74
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If Not Lump Sum, Cost Per Unit	Total Cost	
	Quantity	

Contractor's Signature

Printed Name: _____



Request For Proposal#

Gas Service

Quote Date: 03/18/2019
Invoice Date:

Project: Lynn Lane WWTP

Bill to: Crossland-Heavy Contractors
Attn: Jason Smith
Address: 14149 East Admiral
Tulsa, Oklahoma 74133

<u>Description of Work</u>	<u>Amount</u>
Furnish and install Natural Gas Service from Meter to Building per attached drawing.	
Labor:	\$16,092.76
Material:	\$34,972.37
Subtotal:	\$51,065.13
Fee @ 10%:	\$5,106.51
Bond @ 1.17%	\$657.21
Total Due This Invoice:	\$56,828.85

MATERIALS & EQUIPMENT		A	B	C	D	E
QTY	DESCRIPTION OF WORK	UNIT COST	UNIT LABOR	EXTENDED MATERIAL	EXTENDED LABOR	NET TOTALS
1000	Material and Labor	\$7,707.03	209.00	\$7,707.03	209.00	PIPEFITTER
		\$0.00	0.00	\$0.00	0.00	PIPEFITTER
		\$0.00	0.00	\$0.00	0.00	PIPEFITTER
		\$0.00	0.00	\$0.00	0.00	PIPEFITTER
				\$0.00	0.00	
	Subtotal Material Cost			\$7,707.03	209.00	
	Sales Tax @ 8.517%			\$0.00		
	Fee On Material @ 10%			\$0.00		
			Total Material Cost			\$7,707.03
Labor & Supervision		Unit Labor		Total Labor		
Hrs.	Description	Cost		Cost		
2090	Pipefitter & Plumber	\$68.00		\$14,212.00		
	Sheetmetal	\$68.00		\$0.00		
16.7	Supervision	\$83.00		\$1,387.76		
1	Project Manager	\$85.00		\$85.00		
6	Truck & Driver	\$68.00		\$408.00		
0	Detailer	\$65.00		\$0.00		
232.7			Total Labor Cost			\$16,092.76
Subcontract Costs						
000	Road Bore			\$0.00		
	Insulation			\$0.00		
	Controls			\$0.00		
1	Remove and Patch Road			\$23,440.00		
			Total Subcontracts			\$23,440.00
Equipment Rental & Tool Costs						
Hrs.	Description	Unit Price		Total Price		
	Consumables @ 10% of Material Cost			\$770.70		
	Small Tools @ 5% of Labor Cost			\$804.64		
1	Backhoe	\$1,875.00		\$1,875.00		
1	Upright Tamper	\$375.00		\$375.00		
		Total Tool & Equipment Rental Costs				\$3,825.34
			Total Direct Costs			\$51,065.13
		Field Overhead Expense @ 10%				\$5,106.51
			Total field Costs			\$56,171.64
		Bond @ 1.17%				\$657.21
			Total Cost for this Change			\$56,828.85

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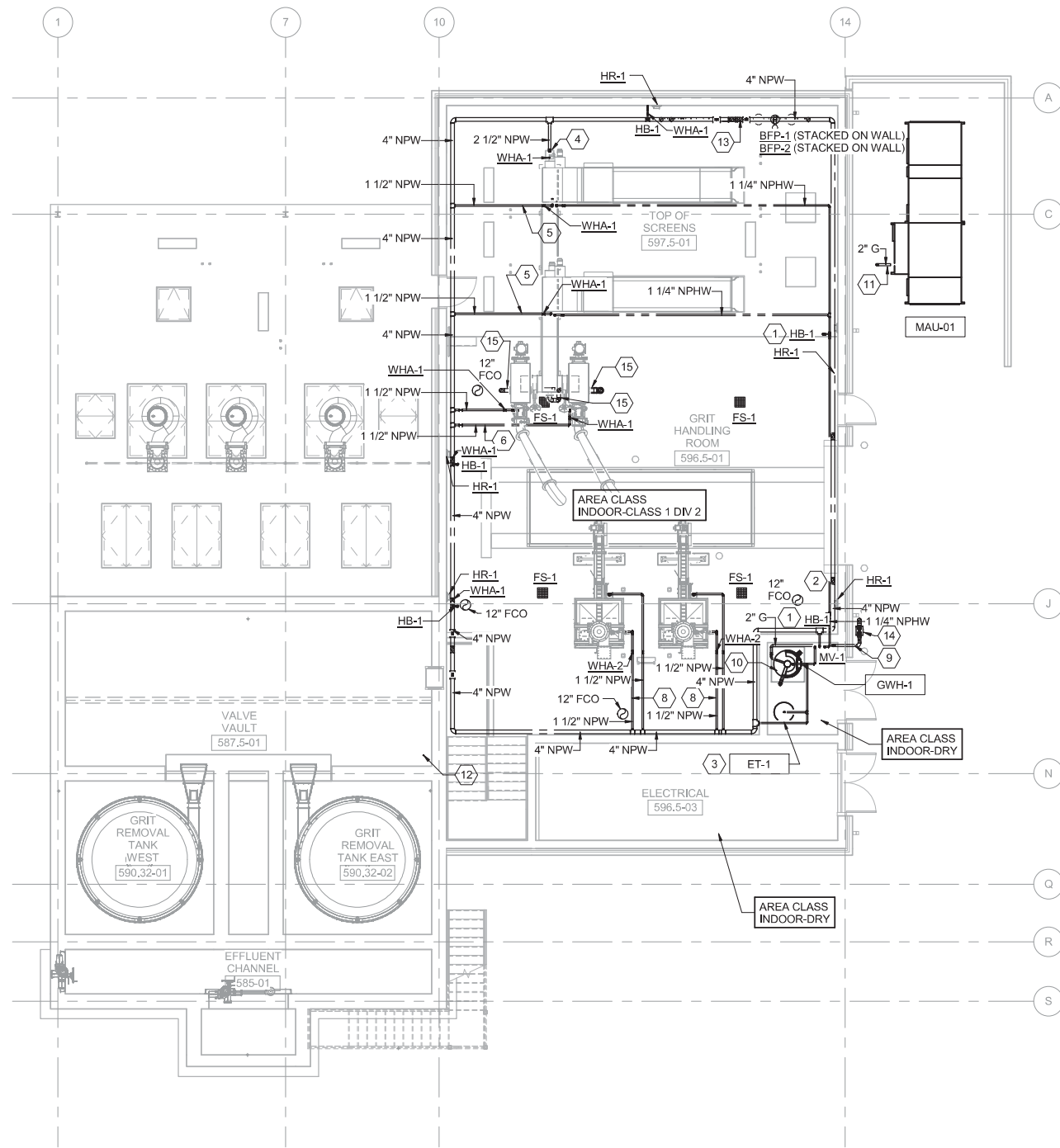
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596.5 FINISH FLOOR GRIT HANDLING ROOM PLUMBING FLOOR PLAN

1/8" = 1'-0"

GENERAL NOTES

- REFER TO 00P502 FOR PLUMBING MATERIAL LIST.
- REFER TO 4/00P501 FOR PIPE HANGER INSTALLATION DETAIL.
- ALL INTERIOR/EXTERIOR WALL PENETRATIONS SHALL BE SEALED AIR/WATER TIGHT. REFER TO 2/00M502 FOR PIPE PENETRATION THRU WALL DETAIL.
- PROVIDE SHUTOFF VALVES IN CW/HW BRANCHES TO ALL PLUMBING FIXTURES AND PROCESS EQUIPMENT. PROVIDE SHUTOFF VALVES WITH DIRT LEG AT CONNECTIONS TO ALL GAS FIRED EQUIPMENT.
- NO PIPING SHALL BE ROUTED OVER ELECTRICAL EQUIPMENT.
- FINISHED FLOOR ELEVATION = 0'-0". INVERT ELEVATIONS LISTED ARE FOR REFERENCE ONLY. CONTRACTOR SHALL COORDINATE EXACT INVERT ELEVATIONS IN THE FIELD WITH OTHER TRADES.
- ALL EQUIPMENT, DEVICES, WIRING, CONDUIT, ETC. INSTALLED IN CLASS 1 DIV 2 SPACE SHALL MEET OR EXCEED CLASS 1 DIV 2 CLASSIFICATION REQUIREMENTS.
- PROVIDE MANUAL ISOLATION VALVES AT ALL NPW CONNECTIONS TO EQUIPMENT IF NOT PROVIDED BY EQUIPMENT MANUFACTURER.
- PIPE SUPPORTS ARE NOT SHOWN FOR ALL PIPING SYSTEMS. SUPPORT ALL PIPING IN ACCORDANCE WITH SECTION 40 05 07.

KEY NOTES (X)

- 1" NPW DOWN TO HB-1/WH-1. PROVIDE SHUTOFF VALVE IN VERTICAL.
- STACK PIPING ON EXTERIOR WALL.
- EXPANSION TANK LOCATED IN PIPING ABOVE.
- ROUTE 2-1/2" NPW TO SCREENING SLUICE. REFER TO PROCESS PLANS FOR CONTINUATION.
- ROUTE 1-1/2" NPW TO FINE SCREEN. REFER TO PROCESS PLANS FOR CONTINUATION.
- ROUTE 1-1/2" NPW TO SCREENING WASHER COMPACTOR. REFER TO PROCESS PLANS FOR CONTINUATION.
- ROUTE 1" NPW TO GRIT REMOVAL UNIT. INSTALL WHA-1 IN 1" NPW WITHIN VALVE VAULT 587.5-01 IN ACCESSIBLE LOCATION. REFER TO PROCESS PLANS FOR CONTINUATION.
- ROUTE 1-1/2" NPW TO GRIT WASHER/DEWATERING UNIT. REFER TO PROCESS PLANS FOR CONTINUATION.
- ROUTE GAS PIPING TO GAS-FIRED WATER HEATER. PROVIDE SHUT-OFF VALVE, PRESSURE REDUCING VALVE AND DIRT LEG AT CONNECTION TO GAS FIRED WATER HEATER. PRESSURE REDUCING VALVE SHALL BE SIZED TO REDUCE GAS PRESSURE FROM 2 PSI TO ACCEPTABLE WATER HEATER GAS PRESSURE AT FULL RANGE OF OPERATION. ROUTE PRESSURE REDUCING VALVE VENT UP THROUGH ROOF AND TERMINATE WITH DOWN TURNED ELBOW.
- ROUTE WATER HEATER COMBUSTION AIR/FLUE THROUGH ROOF. COORDINATE EXACT SIZE AND ROUTING WITH WATER HEATER MANUFACTURER. REFER TO 2/00P501 FOR GAS FIRED WATER HEATER DETAIL.
- ROUTE GAS PIPING TO MAU-01. PROVIDE SHUT-OFF VALVE, PRESSURE REDUCING VALVE AND DIRT LEG AT CONNECTION TO MAKEUP AIR UNIT. PRESSURE REDUCING VALVE SHALL BE SIZED TO REDUCE GAS PRESSURE FROM 2 PSI TO ACCEPTABLE MAU-01 GAS PRESSURE AT FULL RANGE OF OPERATION.
- 1" NPW UP TO HB-1 LOCATED 24" ABOVE TOC GRIT STRUCTURAL LEVEL (209'). PROVIDE SHUTOFF VALVE IN VERTICAL. PROVIDE ASSOCIATED HR-1 24" ABOVE TOC GRIT STRUCTURAL LEVEL (209').
- BACKFLOW PREVENTERS ON WALL. REFER TO 3/00P501 FOR WATER SERVICE ENTRANCE DETAIL.
- METER/PRESSURE REGULATOR, COORDINATE EXACT SITE GAS MAIN PRESSURE WITH UTILITY. IF MAIN PRESSURE IS HIGHER THAN 2 PSI, PROVIDE GAS PRESSURE REGULATOR IN VERTICAL GAS MAIN OUTSIDE THE BUILDING SIZED FOR 1200 CFH AT INCOMING PRESSURE DOWN TO 2 PSI. PROVIDE SHUTOFF VALVE IN VERTICAL GAS MAIN ON EITHER SIDE OF PRESSURE REDUCING VALVE. IF PRESSURE REDUCING VALVE IS NOT NEEDED, THEN PROVIDE A SINGLE SHUTOFF VALVE ON OUTSIDE MAIN.
- 6" DRN UP TO EXTEND TO EQUIPMENT DRAIN DISCHARGE. REFER TO PROCESS PLANS FOR CONTINUATION.

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ISSUE	DATE	DESCRIPTION
0	12/21/2017	ISSUED FOR CONSTRUCTION

PROJECT MANAGER		JOEL CANTWELL
CIVIL	T. TOWNSEND	
STRUCTURAL	S. LOEFFLER	
ARCHITECTURAL	K. REEVE	
PROCESS	T. TOWNSEND	
MECHANICAL	B. PERLBERG	
PLUMBING	B. PERLBERG	
ELECTRICAL	D. BESINGER	
PROJECT NUMBER	10026444	

BROKEN ARROW
MUNICIPAL AUTHORITY
CITY OF BROKEN ARROW, OKLYNN LANE WWTP
HEADWORKS IMPROVEMENTSHEADWORKS FACILITY
PLUMBING
FLOOR PLANFILENAME 10026444_01_Mechanical
SCALE 1/8" = 1'-0"SHEET
10P102

Summary of FAP Loan Expenditures

Total Loan amount: \$11,200,000.00

Construction Contract award: \$9,772,200.00

Change Order #1: \$109,954.37

Change Order #2: \$90,750.00

Change Order #3: \$132,012.66

Change Order #4: \$406,100.00

Amended Construction Contract: \$10,511,017.00

Construction Assistance: \$375,928.00

Total Project Costs To-Date: \$10,886,945.00

Loan value remaining: \$313,055.00

Value remaining of Construction Contract Changes per CBA: 2.5% or \$238,402.97

Gas Line Proposed Change Order:

Installation of 2" poly gas line from Headworks to main entrance meters

- Cost: \$62,511.74
 - Revised Project Cost - \$10,573,528.77
 - % change to CBA: 8.2%
 - Remaining Change Order Value: \$175,891.23
 - Loan Value Remaining: \$250,543.23

Additional Known Costs:

- ONG Gas Line installation
 - Cost: \$48,370.00