National Aeronautics and Space Administration John C. Stennis Space Center Stennis Space Center, MS 39529-6000

FIELD CHANGE REQUEST (FCR)

(IMPLEMENTED BY SSTD 8070-0001-CONFIG)

FCR No NNS12AA95T-001 Contractor Sauer, Inc. Contract No. NNS12AA95T Initiator/Company Jacobs F **EMI No.** 11B315-01 Spec./Section **Drawing No.** C-405/<u>C-513</u> **Date** 25 Feb 13 Description of problem and recommended change: Problem: Potable water service will be required for area 9000. Solution: 1) Install a 14" gate valve in the new 14" HDPE potable water line west of the tee shown in Detail 28 (Connection to Existing 14" Water Main) on C-513 at approximately Station 165+15. 2) Prior to installing the flowable fill in this existing A-C pipe section, salvage the new 14" gate valve installed in the existing potable water line and remove the new 14" HDPE cross connection pipe located north of the isolation valve. Install a cap on this isolation valve for future extension. This work falls within the same type of work on the project. An additional AHA is not required. No Yes Not to Exceed Cost Impact l No Schedule Impact Yes No. of Days _____ **Project Manager** Date **DISPOSITION (NASA) Evaluation:** Construction Engineer Date **Quality Engineer** Safety Engineer Date CCB Approved for Implementation Yes □ No COTR Date **Contracting Officer** Date

FIELD CHANGE REQUEST (FCR) INSTRUCTIONS

PURPOSE:

The Field Change Request (FCR) is used to document, track, and implement changes. The FCR may be initiated by anyone associated with the project.

An FCR is initiated to document the following:

- a. Discrepancies that may exist between the drawings/specifications and field conditions.
- b. Inconsistencies in the drawings and/or specifications.
- c. Recommended design or specification changes that do not affect form, fit, or function (variance).
- d. Changes that are necessary to correct deficiencies in the design or specification.

An FCR may also be initiated by the PMD Office to request that the Contractor evaluate, for cost and schedule impact, proposed changes to the drawings/specifications.

INSTRUCTIONS:

INITIATOR -

- 1. Provide all information requested at the top of the FCR form.
- 2. Describe the recommended change; provide rationale and justification in detail.
- 3. List all documentation affected, including revision.
- 4. Provide all redlined documentation with the FCR within 2 working days.
- 5. FCR number will be given by Configuration Control.

- **CONTRACTOR** 1. Cost/schedule impacts must be determined and noted in the space provided. Attach additional details, if necessary.
 - 2. All FCRs must be signed by the Project Manager.
 - 3. Submit the FCR to NASA for evaluation and disposition. NOTE: Change may NOT be implemented until written approval is received from the Contracting Officer.

NASA -

- 1. The designated PMD engineer evaluates the change and determines the appropriate disposition.
- 2. Submit the FCR to the CCB/TRG for review and concurrence.
- 3. All changes that impact cost or schedule must be submitted to the Contracting Officer for approval.
- 4. Submit changes that affect configuration to the Configuration Control Board (CCB) within 5 working days.
- 5. Provide a copy of the completed FCR to the Contractor.
- 6. Provide the original FCR to Configuration Control.

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National Aeronautics and Space Administration

John C. Stennis Space Center Stennis Space Center, MS 39529-6000



March 5, 2013

Reply to Attn of: RA10/13-0218DAW

Sauer Incorporated
Attn: (b)(6)
11223 Phillips Pkwy, Drive East
Jacksonville, FL 32256-1574

Subject: EMI: 11B315-01 Upgrades to Potable Water System. NASA Task Order: NNS12AA95T

The following listed Field Change Request (FCR) is being sent to you for cost and schedule impact:

FCR NNS12AA95T-001:

Problem: Potable water service will be required for area 9000.

Solution:

- 1) Install a 14" gate valve in the new 14" HDPE potable water line west of the tee shown in Detail 28 (Connection to Existing 14" Water Main) on C-513 at approximately Station 165+15.
- 2) Prior to installing the flowable fill in this existing A-C pipe section, salvage the new 14" gate valve installed in the existing potable water line and remove the new 14" HDPE cross connection pipe located north of the isolation valve. Install a cap on this isolation valve for future extension.

This work falls within the same type of work on the project. An additional AHA is not required.

NOTE: ** "ANY COMMENT(S) THAT RESULT IN A CHANGE TO THE CONTRACT COST, SCOPE, OR SCHEDULE YOU MUST NOTIFY THE CONTRACTING OFFICER FOR APPROVAL PRIOR TO IMPLEMENTATION OR ANY COSTS ARE INCURRED."

This request for pricing does not commit the Government to pay any cost incurred in submitting the price or in making necessary studies or designs for its preparation, nor to contract for service or supplies.

PROPOSALS MUST SET FORTH FULL, ACCURATE, AND COMPLETE INFORMATION AS REQUIRED BY THIS FCR. THE PENALTY FOR MAKING FALSE STATEMENTS IN PROPOSALS IS PRESCRIBED IN 18 U.S.C. 1001.

In order to expedite these changes, please return a signed copy with cost breakdown to Jason Edge, in the Office of Procurement, DA00, no later than close of business, March 12, 2013.

If you have any questions, give Mr. Dale A. Woolridge a call at ext. 228-688-1655.

Jason F. Edge Contracting Officer

cc:

Jacobs-FOSC/ Ms. Johnson / Ms. Smith/Official file

National Aeronautics and Space Administration John C. Stennis Space Center Stennis Space Center, MS 39529-6000

FIELD CHANGE REQUEST (FCR)

(IMPLEMENTED BY SSTD 8070-0001-CONFIG)

FCR No NNS12AA95T-001 Contract No. NNS12AA95T Sauer, Inc. Contractor EMI No. 11B315-01 Jacobs F Initiator/Company **Drawing No.** C-405/C-513 Spec./Section Date 25 Feb 13 Description of problem and recommended change: Problem: Potable water service will be required for area 9000. Solution: 1) Install a 14" gate valve in the new 14" HDPE potable water line west of the tee shown in Detail 28 (Connection to Existing 14" Water Main) on C-513 at approximately Station 165+15. 2) Prior to installing the flowable fill in this existing A-C pipe section, salvage the new 14" gate valve installed in the existing potable water line and remove the new 14" HDPE cross connection pipe located north of the isolation valve. Install a cap on this isolation valve for future extension. This work falls within the same type of work on the project. An additional AHA is not required. Not to Exceed Yes No Cost Impact No. of Days No Yes Schedule Impact Date Project Manager DISPOSITION (NASA) **Evaluation:** Date Construction Engineer Date **Quality Engineer** Date Safety Engineer No Yes CCB Approved for Implementation COTR Date Contracting Officer

FIELD CHANGE REQUEST (FCR) INSTRUCTIONS

PURPOSE:

The Field Change Request (FCR) is used to document, track, and implement changes. The FCR may be initiated by anyone associated with the project.

An FCR is initiated to document the following:

- a. Discrepancies that may exist between the drawings/specifications and field conditions.
- b. Inconsistencies in the drawings and/or specifications.
- c. Recommended design or specification changes that do not affect form, fit, or function (variance).
- d. Changes that are necessary to correct deficiencies in the design or specification.

An FCR may also be initiated by the PMD Office to request that the Contractor evaluate, for cost and schedule impact, proposed changes to the drawings/specifications.

INSTRUCTIONS:

- INITIATOR 1. Provide all information requested at the top of the FCR form.
 - Describe the recommended change; provide rationale and justification in detail.
 - List all documentation affected, including revision.
 - Provide all redlined documentation with the FCR within 2 working days.
 - FCR number will be given by Configuration Control.

- CONTRACTOR 1. Cost/schedule impacts must be determined and noted in the space provided. Attach additional details, if necessary.
 - 2. All FCRs must be signed by the Project Manager.
 - 3. Submit the FCR to NASA for evaluation and disposition. NOTE: Change may NOT be implemented until written approval is received from the Contracting Officer.

NASA -

- 1. The designated PMD engineer evaluates the change and determines the appropriate disposition.
- Submit the FCR to the CCB/TRG for review and concurrence.
- 3. All changes that impact cost or schedule must be submitted to the Contracting Officer for approval.
- 4. Submit changes that affect configuration to the Configuration Control Board (CCB) within 5 working days.
- 5. Provide a copy of the completed FCR to the Contractor.
- 6. Provide the original FCR to Configuration Control.

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Standalone pricing for FCR-001

Description	Unit	Quantity	Unit Price	Unit Extended
Install 14" Gate Valve Assembly	ea	1	\$9,823.63	\$9,823.63
Install 14" Plug at North Gate Valve	ea	1	\$1,096.78	\$1,096.78
Remove 14" Gate Valve Assembly	ea	1	\$1,007.56	\$1,007.56
Remove 14" HDPE	lf	50	\$15.40	\$770.00

Subtotal:	\$12,697.97
Bond 1.5%	\$190.47
Total FCR-001	\$12,888.44

Summary Page for Proposed Connections Changes Attachment "B"

Connection Location	Deduct	Add	Delta
501+75	\$ (26,792.32)	\$ 18,418.18	\$ (8,374.14)
164+26	\$ (6,774.15)	\$ 13,265.14	\$ 6,490.99
130+44	\$ (15,877.74)	\$ 15,076.02	\$ (801.72)
921+98	\$ (15,565.13)	\$ 14,517.31	\$ (1,047.82)
947+00	\$ (13,366.58)	\$ 14,226.78	\$ 860.20
976+75	\$ (13,136.73)	\$ 14,538.78	\$ 1,402.05
426+60	\$ (14,144.67)	\$ 14,409.98	\$ 265.31
	Ne	t Cost Change	\$ (1,205.11)

Value Engineering at Tie In Sta 501+75, Sheet C421 Detail 7 - Sheet 505

Description	Unit	Quantity	Unit Price	Unit Extend	ded
DEDUCT					
16 x 16 TEE	EA	-2		\$ (2,404	
16" GATE VALVE	EA	-1	\$ 7,270.27	\$ (7,27)	
14" GATE VALVE	EA	-1	\$ 7,187.83	\$ (7,18	
16 X 14 REDUCER	EA	-1	\$ 714.30		4.30
16 X 8 REDUCER	EA	-1	\$ 1,571.30	\$ (1,57)	
14 45-DEGREE FITTING	EA	-2	\$ 732.85	\$ (1,46	
14" TRANSITION FITTING	EA	-1	\$ 1,441.38	\$ (1,44	1.38
16" HDPE PIPE	LF	-80	\$ 41.95	\$ (3,35	6.00
14" HDPE PIPE	LF	-40	\$ 34.53	\$ (1,38	1.20
ADD			SUBTOTAL	\$ (26,79	
16 X 8 TEE	EA	1	\$ 696.60	\$ 69	6.60
8 x 8 TEE	EA	1	\$ 1,044.99	\$ 1,04	4.99
8" VALVE	EA	1	\$ 2,060.30	\$ 2,06	0.30
8 X 4 REDUCER	EA	1	\$ 621.10	-	1.10
4" MJ ADAPTOR	EA	1	\$ 96.84		6.84
14 X 4 TAPPING ASSEMBLY	EA	1	\$ 5,565.20		55.20
4" BACK FLOW DEVICE	EA	1	\$ 6,062.66		2.66
4" MJ CAP	EA	1			6.84
4" MJ 90 DEGREE FITTING	EA	1	T		6.84
4" C900	LF	40	\$ 12.88		15.20
8" HDPE	LF	80	\$ 19.52		61.60
F			SUBTOTAL	\$ 18,41	18.18

Net Cost Change \$ (8,374.14)

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Value Engineering at Tie In Sta 164+26, Sheet C405 Detail 28 - Sheet 513

Description	Unit	Quantity	Unit Price	Unit Extende	d
DEDUCT					
14 x 14 TEE	EA	-1	\$ 1,044.49	\$ (1,04	4.49
14 45-DEGREE FITTING	EA	-2	\$ 732.85	\$ (1,46	5.70
14" TRANSITION FITTING	EA	-2	\$ 1,441.38	\$ (2,88	2.76
14" HDPE PIPE	LF	-40	\$ 34.53	\$ (1,38	1.20
			SUBTOTAL	\$ (6,77	4.15
ADD					
14 x 4 tapped cap	EA	1	\$ 734.70	\$ 73	4.70
4" MJ ADAPTOR	EA	1	\$ 96.84	\$ 9	6.84
14 X 4 TAPPING ASSEMBLY	EA	1	\$ 5,565.20	\$ 5,56	5.20
4" BACK FLOW DEVICE	EA	1	\$ 6,062.66	\$ 6,06	2.66
4" MJ CAP	EA	1	\$ 96.84	\$ 9	6.84
4" MJ 45 DEGREE FITTING	EA	2	\$ 96.84	\$ 19	3.69
4" C900	LF	40	\$ 12.88	\$ 51	5.20
			SUBTOTAL	\$ 13,26	5.14
		Net	Cost Change	\$ 6,49	0.99

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Value Engineering at Tie In Sta 130+44, Sheet C403 Detail 4 - Sheet C514

Description	Unit	Quantity	Unit Price	Unit	Extended
DEDUCT					
16" GATE VALVE	EA	-1	\$ 7,270.27	\$	(7,270.27)
16 X 14 REDUCER	EA	-1	\$ 714.30	\$	(714.30)
16" 90-DEGREE FITTING	EA	-1	\$ 999.97	\$	(999.97)
16" 45-DEGREE FITTING	EA	-4	\$ 838.58	\$	(3,354.32)
14" TRANSITION FITTING	EA	-1	\$ 1,441.38	\$	(1,441.38)
16" HDPE PIPE	LF	-50	\$ 41.95	\$	(2,097.50)
10 MBIETHE			SUBTOTAL	\$	(15,877.74)
ADD					
16x4 Reducer	EA	1	\$ 1,571.30	\$	1,571.30
4" MJ VALVE	EA	1	\$ 651.80	\$	651.80
4" MJ ADAPTOR	EA	1	\$ 96.84	\$	96.84
14 X 4 TAPPING ASSEMBLY	EA	1	\$ 5,565.20	\$	5,565.20
4" BACK FLOW DEVICE	EA	1	\$ 6,062.66	\$	6,062.66
4" MJ CAP	EA	1	\$ 96.84	\$	96.84
4" MJ 45 DEGREE FITTING	EA	4	\$ 96.84	\$	387.38
4" C900	LF	50	\$ 12.88	\$	644.00
			SUBTOTAL	\$	15,076.02
		Net	Cost Change	\$	(801.72

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Value Engineering at Tie In Sta 921+98, Sheet C410 Detail 25 - Sheet 512

Description	Unit	Quantity	Unit Price	Uni	t Extended
DEDUCT					
14 x 14 TEE	EA	-1	\$ 1,044.49	\$	(1,044.49)
14" GATE VALVE	EA	-1	\$ 7,187.83	\$	(7,187.83)
14 X 12 REDUCER	EA	-1	\$ 671.63	\$	(671.63)
14 90-DEGREE FITTING	EA	-1	\$ 864.55	\$	(864.55)
14 45-DEGREE FITTING	EA	-4	\$ 732.85	\$	(2,931.40)
12" TRANSITION FITTING	EA	-1	\$ 1,138.73	\$	(1,138.73)
14" HDPE PIPE	LF	-50	\$ 34.53	\$	(1,726.50)
14 110121112			SUBTOTAL	\$	(15,565.13)
ADD					
14x4 Tee	EA	1	\$ 1,324.59	\$	1,324.59
4" MJ VALVE	EA	1	\$ 651.80	\$	651.80
4" MJ ADAPTOR	EA	1	\$ 96.84	\$	96.84
12 X 4 TAPPING ASSEMBLY	EA	1	\$ 5,253.20	\$	5,253.20
4" BACK FLOW DEVICE	EA	1	\$ 6,062.66	\$	6,062.66
4" MJ CAP	EA	1	\$ 96.84	\$	96.84
4" MJ 45 DEGREE FITTING	EA	4	\$ 96.84	\$	387.38
4" C900	LF	50	\$ 12.88	\$	644.00
4 0500			SUBTOTAL	\$	14,517.31
		Net	Cost Change	\$	(1,047.82)

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Value Engineering at Tie In Sta 947+00, Sheet C412 Detail 21 - Sheet 511

Description	Unit	Quantity	Unit Price	Unit Extended
DEDUCT				
14 x 14 TEE	EA	-1	\$ 1,044.49	\$ (1,044.4
14" GATE VALVE	EA	-1	\$ 7,187.83	\$ (7,187.8
14 X 12 REDUCER	EA	-1	\$ 671.63	\$ (671.6
14 90-DEGREE FITTING	EA	-1	\$ 864.55	\$ (864.5
14 45-DEGREE FITTING	EA	-1	\$ 732.85	\$ (732.8
12" TRANSITION FITTING	EA	-1	\$ 1,138.73	\$ (1,138.7
14" HDPE PIPE	LF	-50	\$ 34.53	\$ (1,726.5
400			SUBTOTAL	\$ (13,366.5
ADD	EA	1	\$ 1,324.59	\$ 1,324.5
14x4 Tee	EA	1	\$ 651.80	\$ 651.8
4" MJ VALVE		1	\$ 96.84	\$ 96.8
4" MJ ADAPTOR	EA			
14 X 4 TAPPING ASSEMBLY	EA	1	\$ 5,253.20	
4" BACK FLOW DEVICE	EA	1	\$ 6,062.66	\$ 6,062.6
4" MJ CAP	EA	1	\$ 96.84	\$ 96.8
4" MJ 45 DEGREE FITTING	EA	1	\$ 96.84	\$ 96.8
4" C900	LF	50	\$ 12.88	\$ 644.0
			SUBTOTAL	\$ 14,226.7

Net Cost Change \$ 860.20

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Value Engineering at Tie In Sta 976+75, Sheet C414 Detail 23 - Sheet 511

Description	Unit	Quantity	Unit Price	Unit Extended
DEDUCT				
16 x 16 TEE	EA	-1	\$ 1,202.17	\$ (1,202.17
14" GATE VALVE	EA	-1	\$ 7,187.83	\$ (7,187.83
16 X 14 REDUCER	EA	-1	\$ 714.30	\$ (714.30
14 90-DEGREE FITTING	EA	-1	\$ 864.55	\$ (864.55
14" TRANSITION FITTING	EA	-1	\$ 1,441.38	\$ (1,441.38
14" HDPE PIPE	LF	-50	\$ 34.53	\$ (1,726.50
			SUBTOTAL	\$ (13,136.73
ADD				
16x4 TEE	EA	1	\$ 1,324.59	\$ 1,324.59
4" MJ VALVE	EA	1	\$ 651.80	\$ 651.80
4" MJ ADAPTOR	EA	1	\$ 96.84	\$ 96.84
14 X 4 TAPPING ASSEMBLY	EA	1	\$ 5,565.20	\$ 5,565.20
4" BACK FLOW DEVICE	EA	1	\$ 6,062.66	\$ 6,062.66
4" MJ CAP	EA	1	\$ 96.84	\$ 96.84
4" MJ 45 DEGREE FITTING	EA	1	\$ 96.84	\$ 96.84
4" C900	LF	50	\$ 12.88	\$ 644.00
			SUBTOTAL	\$ 14,538.78

Net Cost Change \$

1,402.05

Page 22 redacted for the following reason:
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Value Engineering at Tie In Sta 426+60, Sheet C420 Detail 22 - Sheet 511

Description	Unit	Quantity	Unit Price	Un	it Extended
DEDUCT					
16 x 16 TEE	EA	-1	\$ 1,202.17	\$	(1,202.17
16" GATE VALVE	EA	-1	\$ 7,270.27	\$	(7,270.27
16 X 14 REDUCER	EA	-1	\$ 714.30	\$	(714.30)
16" 90-DEGREE FITTING	EA	-1	\$ 999.97	\$	(999.97
16" 45-DEGREE FITTING	EA	-1	\$ 838.58	\$	(838.58)
14" TRANSITION FITTING	EA	-1	\$ 1,441.38	\$	(1,441.38
16" HDPE PIPE	LF	-40	\$ 41.95	\$	(1,678.00)
			SUBTOTAL	\$	(14,144.67)
ADD					
16x4 TEE	EA	1	\$ 1,324.59	\$	1,324.59
4" MJ VALVE	EA	1	\$ 651.80	\$	651.80
4" MJ ADAPTOR	EA	1	\$ 96.84	\$	96.84
14 X 4 TAPPING ASSEMBLY	EA	1	\$ 5,565.20	\$	5,565.20
4" BACK FLOW DEVICE	EA	1	\$ 6,062.66	\$	6,062.66
4" MJ CAP	EA	1	\$ 96.84	\$	96.84
4" MJ 45 DEGREE FITTING	EA	1	\$ 96.84	\$	96.84
4" C900	LF	40	\$ 12.88	\$	515.20
			SUBTOTAL	\$	14,409.98

Net Cost Change \$ 265.31

Page 24 redacted for the following reason:
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10145 Southpark Drive ♦ Gulfport, MS 39503 ♦ Phone (228) 896-7310 ♦ Fax (228) 896-7312

Attachment - "A"

Purpose

S. H. Anthony, Inc., (SHA), has further reviewed the temporary connection points at various points in the new water system. There are 7 temporary connections, as per the plans SHA would have to shut down the main loop system to install these connections, additionally the new system would have to be flushed, disinfected and testing prior to making the proposed connections. SHA feels that these connections need to be modified as we have outlined below, to eliminate the system shut down and to provide the proper amount of water flow for flushing, disinfection and testing. The connection points per plan are listed below.

Phase Number	Drawing Sheet No.	Detail Sheet No.	Station Number	Existing Pipe Size
1	C421	Detail 7 - Sheet C505	501+75	14 inch
2	C405	Detail 28 – Sheet C513	164+26	14 inch
3	C403	Detail 4 - Sheet C514	130+44	14 Inch
5	C410	Detail 25 – Sheet C512	921+98	12 inch
5/6	C412	Detail 21 – Sheet C511	947+00	12 inch
5	C414	Detail 23 - Sheet C511	976+75	14 inch
6	C420	Detail 22 - Sheet C511	426+60	14 inch

Proposed Changes

Station 501+75

Per the plans, the final connection at this location is an 8" connection to an existing 8" A-C water main. The branch size from the new main is a 16" line to accommodate the flow from the temporary connection to the existing 14" A-C water main. SHA proposes to change the branch connection size at the new water main from a 16" to an 8" connection. Additionally in place of a 14" temporary connection SHA proposes to install a 14" x 4" tapping saddle and tapping valve at the existing 14" main. We would then install a 4" cross connection device (back flow preventer) and then connect the 4" main to the 8" main. A 4" connection allows for sufficient flow to flush the 16" new water main. Once the new main and 8" service is in surface, SHA would remove the tapping sleeve, valve and back flow preventer and turn over to the owner for their use.

Station 164+26 - Also location for FCR NNS12AA95T - 001

Per the plans, this would be a temporary connection point to the existing 14" main. Per the FCR-001 request we would need to add a 14" valve to the new main and salvage the 14" valve at the temporary connection. SHA proposes the following, install a 14" x 4" tapping saddle and valve to the existing main, and install a 4" back flow preventer between the tapping valve and the 14" valve on the North side of the new main, via a tapped plug in the new 14" valve. The 14" valve that was to be installed on the existing main can now be moved to the West side of the new "Tee".

Net Cost Change - +\$6,490.99

Station 130+44

Per the plans, this would be a temporary connection on the North side of the new 16" main. SHA proposes to install and 14" \times 4" tapping saddle and valve to the existing main, install a 4" back flow preventer between the tapping valve and the North side of the 16" cross to a 4" gate valve which can be shut off and plugged after the new system in in service.

Net Cost Change - (\$801.72)

Station 921+98

Per the plans, this would be a temporary connection on the North side of the new 14" main. SHA proposes to install and 12" x 4" tapping saddle and valve to the existing main, install a 4" back flow preventer between the tapping valve and the North side of the 14" "Tee" to a 4" gate valve which can be shut off and plugged after the new system in in service.

Net Cost Change - (\$1,047.82)

Station 947+00

Per the plans, this would be a temporary connection on the North side of the new 14" main. SHA proposes to install and 12" x 4" tapping saddle and valve to the existing main, install a 4" back flow preventer between the tapping valve and the North side of the 14" "Tee" to a 4" gate valve which can be shut off and plugged after the new system in in service.

Net Cost Change - + \$860.20

Station 976+75

Per the plans, this would be a temporary connection on the North side of the new 14" main. SHA proposes to install and 14" x 4" tapping saddle and valve to the existing main, install a 4" back flow preventer between the tapping valve and the North side of the 14" "Tee" to a 4" gate valve which can be shut off and plugged after the new system in in service.

Net Cost Change - + \$1,402.05

Station 426+60

Per the plans, this would be a temporary connection on the East side of the new 16" main. SHA proposes to install and 14" x 4" tapping saddle and valve to the existing main, install a 4" back flow preventer between the tapping valve and the East side of the 16" "Tee" to a 4" gate valve which can be shut off and plugged after the new system in in service.

Net Cost Change - + \$265.31

Summary

The proposed changes will allow the existing system to remain in service without interruption for the flushing, disinfecting and testing of the new system. Cross contamination protection at the connection points will protect the existing system and provide the water supply needed to flush the new system. This proposal includes the FCR-001 work as a part of the requested changes without additional cost, in fact there will be a credit issued.

Net Proposed Cost Change - (\$1,205.11)



10145 Southpark Drive ♦ Gulfport, MS 39503 ♦ Phone (228) 896-7310 ♦ Fax (228) 896-7312

March 8, 2013

(b)(6)

Sauer Incorporated 11223 Phillips Parkway Drive Fast Jacksonville, Fla. 32256

RE

Contract No. NNS12AA83B / NNS12AA95T / FCR NNS12AA95T -001

Potable Water System Upgrade, John C. Stennis Space Center, MS

Dear

(b)(6)

Per the referenced Field Change Request (FCR), S. H. Anthony, Inc. (SHA) is submitting a proposal that includes the work associated with this request. In addition, SHA has reviewed the current design for the temporary connection throughout the entire project and submits in this proposal a value engineering request for these temporary connections.

In each phase of the project there is a proposed temporary connection that will in turn have to be removed during the pipe abandonment work. SHA has attached a proposed temporary connection change at each of these locations. (Attachment "A") Per the current design, the temporary connections will require 7-each water shut downs, these shut downs will potentially cause an issue for chlorination and disinfection, in that when a water main is depressurized and drained, sediment build up will be released and when the main is returned to pressure the water can become cloudy and or become non-potable as a result.

SHA has also reviewed the current water source availability for flushing the new lines and have determined that there is not a sufficient number for fire hydrants to properly fill and flush the line. Most of the fire hydrants at SSC are in close proximity to the buildings, the new water mains are mostly along the right-of-ways and a great distance from the existing hydrants.

SHA has attached detail drawings for each proposed new temporary connections. (Attachment "B") In brief summary of these changes, SHA would install a 4-inch hot tap to the existing lines at the temporary connection points. We would also install a 4-inch back flow preventer adjacent to the tap, this would allow for the filling and flushing of the new lines giving the existing system cross connection protection. We would then install 4-inch, C900 PVC pipe from the back flow preventer to the new lines, at the connection point on the new line we would install a valve that will be shut down and plugged as the new lines come into service. All of the 4-inch tapping saddles, valves and back flow preventers will be salvaged and turned over to SSC for future use.

If the proposed changes are incorporated, we can eliminate seven (7) system shut downs, provide an adequate water supply for flushing and disinfection, provide seven (7) each 4-inch hot tap saddles and back flow devices for future use. Also this will include the work associated with the FCR-001 request for credit amount of (\$1,205.11)

Please see the attached detailed price breakdown and proposed change drawing of each temporary connection. Also attached is the product information for the tapping saddle, back flow preventer, C900 PVC pipe and the ductile iron fittings.

The proposed cost for FCR NNS12AA95T-001 is...................................(\$1,205.11)

If you have any questions please feel free to give me a call.

Sincerely,

(b)(6)

Project Manager SH Anthony, Inc.



11223 phillips parkway drive, east jacksonville, florida 32256

P: 904.262.6444 F: 904.268.6156

www.sauer-inc.com

March 11th, 2013

National Aeronautics and Space Administration John C. Stennis Space Center Stennis Space Center, MS 39529-6000

Attn: Jason Edge, Contracting Officer

RE: NNS12AA95T, Potable Water System Upgrades, Stennis Space Center, MS; Sauer Job No. 1603

SUBJECT: FCR-001, Installation of Gate Valve to Facilitate the Potable Water Upgrades

Mr. Edge,

We herein submit our formal cost proposal covering the cost to furnish, and install all work as detailed in FCR-001 and as indicated in section A-A within the FCR. The work includes the installation of a new 14" gate valve, and then salvaging the new 14" gate valve installed in the existing water line, and removing the new HDPE cross section pipe located north of the isolation valve. A cap will also be installed for future expansion.

We received an official FCR for this work on March 5th, 2013.. Our cost proposal contains breakdowns from Sauer and our subcontractor SH Anthony.

We are currently not requesting additional time to complete this work.

If you have any questions or wish to discuss further do not hesitate to call us directly. Sincerely,

(b)(b)

Project Manager

PROPOSAL/ESTIMATE FOR CONTRA	ACT MODIFICATION	N	3/11/13
CONTRACT TITLE:	NNS12AA95T, Pota	able Water System Upgrades, Stennis Space Center, MS;	Sauer Job No. 1603
DESCRIPTION: FCR-001, I	nstallation of Gate Va	alve to Facilitate the Potable Water Upgrades	
PR	IME CONTRACTOR	'S WORK	Revisions/Comments
Direct Materials			THE VICTORIAN COMMITTEE STATE
2. Sales Tax on Materials	% of line 1		
3. Direct Labor			
4. Insurance, Taxes, and Fringe Benefits	% of line 3		
5. Rental Equipment	0/ -511 5	(b)(6)	
6. Sales Tax on Rental Equipment7. Equipment Ownership and Operating Experience	% of line 5	(6)(6)	
8. SUBTOTAL (add lines 1 - 7)	nses		
9. Field Overhead	% of line 8		
10. SUBTOTAL (Add lines 8 & 9)			
Prime Remarks:			
	UBCONTRACTOR'S	WORK	
11. Direct Materials		0	
12. Sales Tax on Materials	% of line 11	0.00%	
13. Direct Labor		0	
14. Insurance, Taxes, and Fringe Benefits	% of line 13	0.00%	
15. Rental Equipment		0	
16. Sales Tax on Rental Equipment	% of line 15	0.00%	
17. Equipment Ownership and Operating Exp.	enses	0	
18. SUBTOTAL (add lines 11 - 17) 19. Field Overhead	0/ -512 - 40	0.000(
20. SUBTOTAL (Add lines 18 & 19)	% of line 18	0.00%	
21. Home Office Overhead	% of line 20	0.00%	
22. Profit	% of line 20	10.00% 0	
23. SUBTOTAL (Add Lines 20-22)		12,888	
Sub's Remarks: SH Anthony	\$12,888.40		
24. Prime Contractor's Work (from Line 10)	SUMMARY		
25. Sub-Contractor's Work (from line 23)		_	
26. SUBTOTAL (add lines 24 & 25)		-	
27. Prime Overhead	% of Line 25	_	
8. Prime Profit	% of Line 24	_	
9. Gross Receipts Tax	% of Line 26	(b)(6)	
30. SUBTOTAL (add lines 26 -29)			
31. Prime Contractor's Bond Premium	% of Line 30		
32. TOTAL COST (Add Lines 30 & 31)			
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10145 Southpark Drive ♦ Guifport, MS 39503 ♦ Phone (228) 896-7310 ♦ Fax (228) 896-7312

11 March 2013

Mr. (b)(6)

Sauer Incorporated 11223 Phillips Parkway Drive East Jacksonville, Fla. 32256

RE: Contract No. NNS12AA83B / NNS12AA95T

Reference: FCR-001 Potable Water System Upgrade, John C. Stennis Space Center, MS

Dear Mr. (b)(6)

S.H. Anthony offers the attached proposal to accomplish the work described in the issued Field Change Request (FCR-001).

			Unit	
Description	Unit	Quantity	Price	Unit Extended
Install 14" Gate Valve Assembly	ea	1	\$9,823.63	\$9,823.63
Install 14" Plug at North Gate Valve	ea	1	\$1,096.78	\$1,096.78
Remove 14" Gate Valve Assembly	ea	1	\$1,007.56	\$1,007.56
Remove 14" HDPE	lf.	50	\$15.40	\$770.00

 Subtotal:
 \$12,697.97

 Bond 1.5%
 \$190.47

 Total FCR-001
 \$12,888.44

(b)(6)

Project Manager SH Anthony, Inc.



11223 phillips parkway drive, east jacksonville, florida 32256

P: 904.262.6444 F: 904.268.6156

www.sauer-inc.com

March 11th, 2013

National Aeronautics and Space Administration John C. Stennis Space Center Stennis Space Center, MS 39529-6000

Attn: Jason Edge, Contracting Officer

RE: NNS12AA95T, Potable Water System Upgrades, Stennis Space Center, MS; Sauer Job No. 1603

SUBJECT: FCR-001, Installation of Gate Valve to Facilitate the Potable Water Upgrades

Mr. Edge,

We herein submit our formal cost proposal covering the cost to furnish, and install all work as detailed in FCR-001 and as indicated in section A-A within the FCR. The work includes the installation of a new 14" gate valve, and then salvaging the new 14" gate valve installed in the existing water line, and removing the new HDPE cross section pipe located north of the isolation valve. A cap will also be installed for future expansion.

We received an official FCR for this work on March 5th, 2013.. Our cost proposal contains breakdowns from Sauer and our subcontractor SH Anthony.

We are currently not requesting additional time to complete this work.

If you have any questions or wish to discuss further do not hesitate to call us directly. Sincerely.

(b)(6)

Project Manager

PROPOSAL/ESTIMATE FOR CONTR	ACT MODIFICATION		3/11/13
CONTRACT TITLE:	NNS12AA95T, Pota	able Water System Upgrades, Stennis Space Center, MS	S; Sauer Job No. 1603
DESCRIPTION: FCR-001,	Installation of Gate Va	alve to Facilitate the Potable Water Upgrades	
PR	IME CONTRACTOR'	'S WORK	Revisions/Comments
Direct Materials			The state of the s
2. Sales Tax on Materials	% of line 1		
3. Direct Labor			
4. Insurance, Taxes, and Fringe Benefits	% of line 3		
5. Rental Equipment	0/ 611 -	(b)(6)	
6. Sales Tax on Rental Equipment7. Equipment Ownership and Operating Experience	% of line 5	(5)(6)	
8. SUBTOTAL (add lines 1 - 7)	enses		
9. Field Overhead	% of line 8		
10. SUBTOTAL (Add lines 8 & 9)	% of life 8		
Prime Remarks:			
S	UBCONTRACTOR'S	WORK	
11. Direct Materials		0	
12. Sales Tax on Materials	% of line 11	0.00%	
13. Direct Labor		0	
14. Insurance, Taxes, and Fringe Benefits	% of line 13	0.00%	
15. Rental Equipment		0	
16. Sales Tax on Rental Equipment	% of line 15	0.00%	
17. Equipment Ownership and Operating Exp	enses	0	
18. SUBTOTAL (add lines 11 - 17)			
19. Field Overhead	% of line 18	0.00%	
20. SUBTOTAL (Add lines 18 & 19)		0	
21. Home Office Overhead	% of line 20	0.00%	
22. Profit	% of line 20	10.00%	
23. SUBTOTAL (Add Lines 20-22) Sub's Remarks: SH Anthony	***	12,888	
Sub's Remarks: SH Anthony	\$12,888.40	,	
	SUMMARY		
24. Prime Contractor's Work (from Line 10)	JOHNAKI		
25. Sub-Contractor's Work (from line 23)			
26. SUBTOTAL (add lines 24 & 25)			
27. Prime Overhead	% of Line 25		
8. Prime Profit	% of Line 24	(1.1.6)	
9. Gross Receipts Tax	% of Line 26	(b)(6)	
30. SUBTOTAL (add lines 26 -29)			
31. Prime Contractor's Bond Premium	% of Line 30		
32. TOTAL COST (Add Lines 30 & 31)			
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rime Contractor: Sauer Incorporate ubcontractor:	ed, d/b/a Sauer So 	utheast	
(b)(6)	Project	Engineer	Pate_3////3_

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10145 Southpark Drive ♦ Guifport, MS 39503 ♦ Phone (228) 896-7310 ♦ Fax (228) 896-7312

11 March 2013

M(b)

Sauer Incorporated 11223 Phillips Parkway Drive East Jacksonville, Fla. 32256

RE: Contract No. NNS12AA83B / NNS12AA95T

Reference: FCR-001 Potable Water System Upgrade, John C. Stennis Space Center, MS

Dear Mr. (b)(6)

S.H. Anthony offers the attached proposal to accomplish the work described in the issued Field Change Request (FCR-001).

			Unit	
Description	Unit	Quantity	Price	Unit Extended
Install 14" Gate Valve Assembly	ea	1	\$9,823.63	\$9,823.63
Install 14" Plug at North Gate Valve	ea	1	\$1,096.78	\$1,096.78
Remove 14" Gate Valve Assembly	ea	1	\$1,007.56	\$1,007.56
Remove 14" HDPE	lf.	50	\$15.40	\$770.00

 Subtotal:
 \$12,697.97

 Bond 1.5%
 \$190.47

 Total FCR-001
 \$12,888.44

(b)(6)

Project Manager SH Anthony, Inc. National Aeronautics and Space Administration

John C. Stennis Space Center Stennis Space Center, MS 39529-6000



May 29, 2013

Reply to Attn of: RA10/13-0803DAW

Sauer Incorporated
Attn: (b)(6)
11223 Phillips Pkwy, Drive East
Jacksonville, FL 32256-1574

Subject: EMI: 11B315-01 Upgrades to Potable Water System. NASA Task Order: NNS12AA95T

The following listed Field Change Request (FCR) is being sent to you for cost and schedule impact:

FCR NNS12AA95T-010:

Problem: The contract documents do not have requirements to label the underground valves.

Solution:

Contractor to label each underground valve as follows: Each valve tag to be stamped according to the attached referenced valve schedule.

- Tags shall be 2x4x1/16" engraved or stamped with the number indicated on the attached schedule.
- Tags and fasteners shall be made of brass or stainless steel.
- Text shall be "sans serif"; font letters shall be ½" tall.
- Sample tags shall be provided to the government for approval.

AHA is not required for this work.

NOTE: ** "ANY COMMENT(S) THAT RESULT IN A CHANGE TO THE CONTRACT COST, SCOPE, OR SCHEDULE YOU MUST NOTIFY THE CONTRACTING OFFICER FOR APPROVAL PRIOR TO IMPLEMENTATION OR ANY COSTS ARE INCURRED."

This request for pricing does not commit the Government to pay any cost incurred in submitting the price or in making necessary studies or designs for its preparation, nor to contract for service or supplies.

PROPOSALS MUST SET FORTH FULL, ACCURATE, AND COMPLETE INFORMATION AS REQUIRED BY THIS FCR. THE PENALTY FOR MAKING FALSE STATEMENTS IN PROPOSALS IS PRESCRIBED IN 18 U.S.C. 1001.

In order to expedite these changes, please return a signed copy with cost breakdown to Jason Edge, in the Office of Procurement, DA00, no later than close of business, June 6, 2013.

If you have any questions, give Mr. Dale A. Woolridge a call at ext. 228-688-1655.

Jason F. Edge

Contracting Officer

cc:

Jacobs-FOSC/

fficial file

National Aeronautics and Space Administration John C. Stennis Space Center Stennis Space Center, MS 39529-6000

FIELD CHANGE REQUEST (FCR)

Date

(IMPLEMENTED BY SSTD 8070-0001-CONFIG) FCR No NNS12AA95T-010 Contract No. NNS12AA95T Contractor Sauer Jacobs **EMI No.** 11B315-01 Initiator/Company Drawing No. ref. valve schedule Spec./Section n/aDate 5/17/2013 Description of problem and recommended change: Potable Water System Upgrades The contract documents do not have requirements to label the underground valves. Contractor to label each underground valve as follows - each valve tag to be stamped according to the attached referenced valve schedule. Tags shall be 2x4x1/16" engraved or stamped with the number indicated on the attached schedule. Tags and fasteners shall be made of brass or stainless steel. Text shall be "sans serif" font, letters shall be 1/2" tall. Sample tag shall be provided to the government for approval. AHA not required for this work. Not to Exceed Yes No Cost Impact No. of Days Yes No Schedule Impact Date **Project Manager DISPOSITION (NASA)** Evaluation: Date Construction Engineer **Quality Engineer** Date Safety Engineer No CCB Approved for Implementation Yes Date COTR

Contracting Officer

Valve ndex#	Valve Number	Valve Size INCHES	Valve Type	Drawing	Plan Detail	Street	Notes
1.	600 - PW	16	GV	C-401-	C-515-1	Saturn Drive	GV = Gate Valve
2.	601 - PW	14	GV	C-401-	C-515-1	Saturn Drive	GV = Gate Valve
3.	602 - PW	16	GV	C-401-	C-515-1	Saturn Drive	GV = Gate Valve
4.	603 - PW	14	GV	C-401-	C-515-1	Saturn Drive	GV = Gate Valve
5.	604 - PW	8	GV	C-401-	C-504-3	Saturn Drive	GV = Gate Valve
6.	605 - PW	8	GV	C-401-	C-504-3	Saturn Drive	GV = Gate Valve
7.	606 - PW	2	ARV	C-401-	C-501-4	Saturn Drive	2" Gate Valve - In Valve Box receives Main V# listed in INDEX (Example xxx-PW)
8.	606 A - PW	2	ARVE	C-401-	C-501-4	Saturn Drive	ARVE=Air Release Valve Enclosure (Example xxx-A-PW)
9.	606 B - PW	1	ARVE	C-401-	C-501-4	Saturn Drive	ARVE=Air Release Valve Enclosure (Example xxx-A-PW)
10.	606 C - PW	2	ARVE	C-401-	C-501-4	Saturn Drive	ARVE=Air Release Valve Enclosure (Example xxx-A-PW)
11.	606 D - PW	2	ARVE	C-401-	C-501-4	Saturn Drive	ARVE=Air Release Valve Enclosure (Example xxx-A-PW)
12.	607 - PW	2	ARV	C-401-	C-501-4	Saturn Drive	2" Gate Valve - In Valve Box receives Main V# listed in INDEX (Example xxx-PW)
13.	607 A - PW	2	ARVE	C-401-	C-501-4	Saturn Drive	ARVE=Air Release Valve Enclosure (Example xxx-A-PW)
14.	607 B - PW	1	ARVE	C-401-	C-501-4	Saturn Drive	ARVE=Air Release Valve Enclosure (Example xxx-A-PW)
15.	607 C - PW	2	ARVE	C-401-	C-501-4	Saturn Drive	ARVE=Air Release Valve Enclosure (Example xxx-A-PW)
16.	607 D - PW	2	ARVE	C-401-	C-501-4	Saturn Drive	ARVE=Air Release Valve Enclosure (Example xxx-A-PW)
17	608 - PW	14	GV	C-410-	C-516-2	"J" Road	GV = Gate Valve
17.	-	14	GV	C-410-	C-516-2	"J" Road	GV = Gate Valve
18.		14	GV	C-410-	C-516-2	"J" Road	GV = Gate Valve
19. 20.	610 - PW 611 - PW	2	ARV	C-410-	C-501-4	"J" Road	2" Gate Valve - In Valve Box receives Main V# listed in INDEX (Example xxx-PW)
21.	611 A -PW	2	ARVE	C-410-	C-501-4	"J" Road	ARVE=Air Release Valve Enclosure (Example xxx-A-PW)
22.	611 B - PW	1	ARVE	C-410-	C-501-4	"J" Road	ARVE=Air Release Valve Enclosure (Example xxx-A-PW)
23.	611 C - PW	2	ARVE	C-410-	C-501-4	"J" Road	ARVE=Air Release Valve Enclosure (Example xxx-A-PW)
24.	611 D - PW	2	ARVE	C-410-	C-501-4	"J" Road	ARVE=Air Release Valve Enclosure (Example xxx-A-PW)
25.	612 - PW	2	ARV	C-410-	C-501-4	"J" Road	2" Gate Valve - In Valve Box receives Main V# listed in INDEX (Example xxx-PW)
26.	612 A - PW	2	ARVE	C-410-	C-501-4	"J" Road	ARVE=Air Release Valve Enclosure (Example xxx-A-PW)

Valve ndex#	Valve Number	Valve Size INCHES	Valve Type	Drawing	Plan Detail	Street	Notes
27.	612 B -PW	1	ARVE	C-410-	C-501-4	"J" Road	ARVE=Air Release Valve Enclosure (Example xxx-A-PW)
28.	612 C - PW	2	ARVE	C-410-	C-501-4	"J" Road	ARVE=Air Release Valve Enclosure (Example xxx-A-PW)
29.	612 D - PW	2	ARVE	C-410-	C-501-4	"J" Road	ARVE=Air Release Valve Enclosure (Example xxx-A-PW)
20	613 - PW	14	GV	C-410-	C-516-2	"J" Road	GV = Gate Valve
30.	613 - PW 614 - PW	14	GV	C-410-	C-516-2	"J" Road	GV = Gate Valve
31.	615 - PW	8	GV	C-410-	C-513-26	"J" Road	GV = Gate Valve
32.		14	GV	C-410-	C-516-2	"J" Road	GV = Gate Valve
33.		14	GV	C-410-	C-516-2	"J" Road	GV = Gate Valve
34.	617 - PW 618 - PW	2	ARV	C-411-	C-501-4	"J" Road	2" Gate Valve - In Valve Box receives Main V# listed in INDEX (Example xxx-PW)
36.	618 A - PW	2	ARVE	C-411-	C-501-4	"J" Road	ARVE=Air Release Valve Enclosure (Example xxx-A-PW)
37.	618 B - PW	1	ARVE	C-411-	C-501-4	"J" Road	ARVE=Air Release Valve Enclosure (Example xxx-A-PW)
38.	618 C - PW	2	ARVE	C-411-	C-501-4	"J" Road	ARVE=Air Release Valve Enclosure (Example xxx-A-PW)
39.	618 D - PW	2	ARVE	C-411-	C-501-4	"J" Road	ARVE=Air Release Valve Enclosure (Example xxx-A-PW)
40.	619 - PW	2	ARV	C-411-	C-501-4	"J" Road	2" Gate Valve - In Valve Box receives Main V# listed in INDEX (Example xxx-PW)
41.	619 A - PW	2	ARVE	C-411-	C-501-4	"J" Road	ARVE=Air Release Valve Enclosure (Example xxx-A-PW)
42.	619 B - PW	1	ARVE	C-411-	C-501-4	"J" Road	ARVE=Air Release Valve Enclosure (Example xxx-A-PW)
43.	619 C - PW	2	ARVE	C-411-	C-501-4	"J" Road	ARVE=Air Release Valve Enclosure (Example xxx-A-PW)
44.	619 D - PW	2	ARVE	C-411-	C-501-4	"J" Road	ARVE=Air Release Valve Enclosure (Example xxx-A-PW)
40	620 - PW	14	GV	C-411-		"J" Road	GV = Gate Valve
45.	020	8	GV	C-411-	C-508-15	"J" Road	GV = Gate Valve
46.	621 - PW	12	GV	C-411-	C-508-15	"J" Road	GV = Gate Valve
47.	622 - PW	14	GV	C-412-	C-509-16	"J" Road	GV = Gate Valve
48.	025	14	GV	C-412-	C-505-36	"J" Road	GV = Gate Valve
49.	624 - PW	14	GV	C-412-	C-518-5	"J" Road	GV = Gate Valve
50.	625 - PW		GV	C-412-	C-518-5	"J" Road	GV = Gate Valve
51.	626 - PW	14	GV	C-412-	C-518-5	"J" Road	GV = Gate Valve
52. 53.	627 - PW 628 - PW	16	ARV	C-412-	C-501-4	"J" Road	2" Gate Valve - In Valve Box receives Main V# listed in INDEX (Example xxx-PW)
54.	628 A - PW	2	ARVE	C-412-	C-501-4	"J" Road	ARVE=Air Release Valve Enclosure (Example xxx-A-PW)

Valve ndex#	Valve Number	Valve Size INCHES	Valve Type	Drawing	Plan Detail	Street	Notes
55.	628 B - PW	1	ARVE	C-412-	C-501-4	"J" Road	ARVE=Air Release Valve Enclosure (Example xxx-A-PW)
56.	628 C - PW	2	ARVE	C-412-	C-501-4	"J" Road	ARVE=Air Release Valve Enclosure (Example xxx-A-PW)
57.	628 D - PW	2	ARVE	C-412-	C-501-4	"J" Road	ARVE=Air Release Valve Enclosure (Example xxx-A-PW)
58.	629 - PW	2	ARV	C-412-	C-501-4	"J" Road	2" Gate Valve - In Valve Box receives Main V# listed in INDEX (Example xxx-PW)
59.	629 A - PW	2	ARVE	C-412-	C-501-4	"J" Road	ARVE=Air Release Valve Enclosure (Example xxx-A-PW)
60.	629 B - PW	1	ARVE	C-412-	C-501-4	"J" Road	ARVE=Air Release Valve Enclosure (Example xxx-A-PW)
61.	629 C - PW	2	ARVE	C-412-	C-501-4	"J" Road	ARVE=Air Release Valve Enclosure (Example xxx-A-PW)
62.	629 D - PW	2	ARVE	C-412-	C-501-4	"J" Road	ARVE=Air Release Valve Enclosure (Example xxx-A-PW)
63.	630 - PW	2	ARV	C-412-	C-501-4	"J" Road	2" Gate Valve - In Valve Box receives Main V# listed in INDEX (Example xxx-PW)
64.	630 A - PW	2	ARVE	C-412-	C-501-4	"J" Road	ARVE=Air Release Valve Enclosure (Example xxx-A-PW)
65.	630 B - PW	1	ARVE	C-412-	C-501-4	"j" Road	ARVE=Air Release Valve Enclosure (Example xxx-A-PW)
66.	630 C - PW	2	ARVE	C-412-	C-501-4	"J" Road	ARVE=Air Release Valve Enclosure (Example xxx-A-PW)
67.	630 D - PW	2	ARVE	C-412-	C-501-4	"J" Road	ARVE=Air Release Valve Enclosure (Example xxx-A-PW)
68.	631 - PW	2	ARV	C-402-	C-501-4	Saturn Drive	2" Gate Valve - In Valve Box receives Main V# listed in INDEX (Example xxx-PW)
69.	631 A - PW	2	ARVE	C-402-	C-501-4	Saturn Drive	ARVE=Air Release Valve Enclosure (Example xxx-A-PW)
70.	631 B - PW	1	ARVE	C-402-	C-501-4	Saturn Drive	ARVE=Air Release Valve Enclosure (Example xxx-A-PW)
71.	631 C - PW	2	ARVE	C-402-	C-501-4	Saturn Drive	ARVE=Air Release Valve Enclosure (Example xxx-A-PW)
72.	631 D - PW	2	ARVE	C-402-	C-501-4	Saturn Drive	ARVE=Air Release Valve Enclosure (Example xxx-A-PW)
73.	632 - PW	8	GV	C-402-	C-514-30	Saturn Drive	GV = Gate Valve
74.	633 - PW	16	GV	C-403-	C-517-4	Saturn Drive	GV = Gate Valve
75.	634 - PW	16	GV	C-403-	C-517-4	Saturn Drive	GV = Gate Valve
76.	635 - PW	16	GV	C-403-	C-517-4	Saturn Drive	GV = Gate Valve
77.	636 - PW	16	GV	C-403-	C-517-4	Saturn Drive	GV = Gate Valve
78.	637 - PW	6	GV	C-403-	C-512-37	Saturn Drive	GV = Gate Valve

Valve	Valve Number	Valve Size INCHES	Valve Type	Drawing	Plan Detail	Street	Notes
79.	638 - PW	2	ARV	C-403-	C-501-4	Saturn Drive	2" Gate Valve - In Valve Box receives Main V# listed in INDEX (Example xxx-PW)
80.	638 A - PW	2	ARVE	C-403-	C-501-4	Saturn Drive	ARVE=Air Release Valve Enclosure (Example xxx-A-PW)
81.	638 B - PW	1	ARVE	C-403-	C-501-4	Saturn Drive	ARVE=Air Release Valve Enclosure (Example xxx-A-PW)
82.	638 C - PW	2	ARVE	C-403-	C-501-4	Saturn Drive	ARVE=Air Release Valve Enclosure (Example xxx-A-PW)
83.	638 D - PW	2	ARVE	C-403-	C-501-4	Saturn Drive	ARVE=Air Release Valve Enclosure (Example xxx-A-PW)
84.	639 - PW	2	ARV	C-403-	C-501-4	Saturn Drive	2" Gate Valve - In Valve Box receives Main V# listed in INDEX (Example xxx-PW)
85.	639 A - PW	2	ARVE	C-403-	C-501-4	Saturn Drive	ARVE=Air Release Valve Enclosure (Example xxx-A-PW)
86.	639 B - PW	1	ARVE	C-403-	C-501-4	Saturn Drive	ARVE=Air Release Valve Enclosure (Example xxx-A-PW)
87.	639 C - PW	2	ARVE	C-403-	C-501-4	Saturn Drive	ARVE=Air Release Valve Enclosure (Example xxx-A-PW)
88.	639 D - PW	2	ARVE	C-403-	C-501-4	Saturn Drive	ARVE=Air Release Valve Enclosure (Example xxx-A-PW)
89.	640 - PW	2	ARV	C-404-	C-501-4	Saturn Drive	2" Gate Valve - In Valve Box receives Main V# listed in INDEX (Example xxx-PW)
90.	640 A - PW	2	ARVE	C-404-	C-501-4	Saturn Drive	ARVE=Air Release Valve Enclosure (Example xxx-A-PW)
91.	640 B - PW	1	ARVE	C-404-	C-501-4	Saturn Drive	ARVE=Air Release Valve Enclosure (Example xxx-A-PW)
92.	640 C - PW	2	ARVE	C-404-	C-501-4	Saturn Drive	ARVE=Air Release Valve Enclosure (Example xxx-A-PW)
93.	640 D - PW	2	ARVE	C-404-	C-501-4	Saturn Drive	ARVE=Air Release Valve Enclosure (Example xxx-A-PW)
		16	GV	C-404-	1	Saturn Drive	GV = Gate Valve
94.	641 - PW	14	GV	C-404-		Saturn Drive	GV = Gate Valve
95.	642 - PW 643 - PW	12	GV	C-404-	C-514-34	Saturn Drive	GV = Gate Valve
96. 97.	644 - PW	2	ARV	C-405-	C-501-4	Saturn Drive	2" Gate Valve - In Valve Box receives Main V# listed in INDEX (Example xxx-PW)
98.	644 A - PW	2	ARVE	C-405-	C-501-4	Saturn Drive	ARVE=Air Release Valve Enclosure (Example xxx-A-PW)
99.	644 B - PW	1	ARVE	C-405-	C-501-4	Saturn Drive	ARVE=Air Release Valve Enclosure (Example xxx-A-PW)
100.	644 C - PW	2	ARVE	C-405-	C-501-4	Saturn Drive	ARVE=Air Release Valve Enclosure (Example xxx-A-PW)
101.	644 D - PW	2	ARVE	C-405-	C-501-4	Saturn Drive	ARVE=Air Release Valve Enclosure (Example xxx-A-PW)

Valve ndex#	Valve Number	Valve Size INCHES	Valve Type	Drawing	Plan Detail	Street	Notes
102.	645 - PW	2	ARV	C-405-	C-501-4	Saturn Drive	2" Gate Valve - In Valve Box receives Main V# listed in INDEX (Example xxx-PW)
103.	645 A - PW	2	ARVE	C-405-	C-501-4	Saturn Drive	ARVE=Air Release Valve Enclosure (Example xxx-A-PW)
104.	645 B - PW	1	ARVE	C-405-	C-501-4	Saturn Drive	ARVE=Air Release Valve Enclosure (Example xxx-A-PW)
105.	645 C - PW	2	ARVE	C-405-	C-501-4	Saturn Drive	ARVE=Air Release Valve Enclosure (Example xxx-A-PW)
106.	645 D - PW	2	ARVE	C-405-	C-501-4	Saturn Drive	ARVE=Air Release Valve Enclosure (Example xxx-A-PW)
	2011	14	GV	C-405-	C-513-28	Saturn Drive	GV = Gate Valve
107.	646 - PW	14	GV	C-405-	C-513-28	Saturn Drive	GV = Gate Valve
108.	647 - PW	14	GV	C-405-	C-513-28	Saturn Drive	GV = Gate Valve
109.	648 - PW	14		C-405-	C-517-3	Saturn Drive	GV = Gate Valve
110.	649 - PW	14	GV	C-405-	C-517-3	Saturn Drive	GV = Gate Valve
111.	650 - PW	16	GV		C-517-3	Saturn Drive	GV = Gate Valve
112.	651 - PW	16	GV	C-405-	C-317-3	Saturione	2" Gate Valve - In Valve Box receives Main V# listed in INDEX
113.	652 - PW	2	ARV	C-406-	C-501-4	Saturn Drive	(Example xxx-PW)
114.	652 A - PW	2	ARVE	C-406-	C-501-4	Saturn Drive	ARVE=Air Release Valve Enclosure (Example xxx-A-PW)
115.	652 B - PW	1	ARVE	C-406-	C-501-4	Saturn Drive	ARVE=Air Release Valve Enclosure (Example xxx-A-PW)
116.	652 C - PW	2	ARVE	C-406-	C-501-4	Saturn Drive	ARVE=Air Release Valve Enclosure (Example xxx-A-PW)
117.	652 D - PW	2	ARVE	C-406-	C-501-4	Saturn Drive	ARVE=Air Release Valve Enclosure (Example xxx-A-PW)
118.	653 - PW	2	ARV	C-406-	C-501-4	Saturn Drive	2" Gate Valve - In Valve Box receives Main V# listed in INDEX (Example xxx-PW)
119.	653 A - PW	2	ARVE	C-406-	C-501-4	Saturn Drive	ARVE=Air Release Valve Enclosure (Example xxx-A-PW)
120.	653 B - PW	1	ARVE	C-406-	C-501-4	Saturn Drive	ARVE=Air Release Valve Enclosure (Example xxx-A-PW)
121.	653 C - PW	2	ARVE	C-406-	C-501-4	Saturn Drive	ARVE=Air Release Valve Enclosure (Example xxx-A-PW)
122.	653 D - PW	2	ARVE	C-406-	C-501-4	Saturn Drive	ARVE=Air Release Valve Enclosure (Example xxx-A-PW)
			CV	C-406-	-	Saturn Drive	GV = Gate Valve
123.	654 - PW	14	GV	C-406-	C-505-8	Saturn Drive	GV = Gate Valve
124.	655 - PW	8	GV	C-406-	C-505-8	Saturn Drive	GV = Gate Valve
125.	656 - PW	8	GV		C-506-35	Saturn Drive	GV = Gate Valve
126. 127.	657 - PW	2	GV	C-406-	C-501-4	Saturn Drive	2" Gate Valve - In Valve Box receives Main V# listed in INDEX (Example xxx-PW)

/alve idex#	Valve Number	Valve Size INCHES	Valve Type	Drawing	Plan Detail	Street	Notes
128.	658 A - PW	2	ARVE	C-407-	C-501-4	Saturn Drive	ARVE=Air Release Valve Enclosure (Example xxx-A-PW)
129.	658 B - PW	1	ARVE	C-407-	C-501-4	Saturn Drive	ARVE=Air Release Valve Enclosure (Example xxx-A-PW)
130.	658 C - PW	2	ARVE	C-407-	C-501-4	Saturn Drive	ARVE=Air Release Valve Enclosure (Example xxx-A-PW)
131.	658 D - PW	2	ARVE	C-407-	C-501-4	Saturn Drive	ARVE=Air Release Valve Enclosure (Example xxx-A-PW)
132.	659 - PW	2	ARV	C-407-	C-501-4	Saturn Drive	2" Gate Valve - In Valve Box receives Main V# listed in INDEX (Example xxx-PW)
133.	659 A - PW	2	ARVE	C-407-	C-501-4	Saturn Drive	ARVE=Air Release Valve Enclosure (Example xxx-A-PW)
134.	659 B - PW	1	ARVE	C-407-	C-501-4	Saturn Drive	ARVE=Air Release Valve Enclosure (Example xxx-A-PW)
135.	659 C -PW	2	ARVE	C-407-	C-501-4	Saturn Drive	ARVE=Air Release Valve Enclosure (Example xxx-A-PW)
	659 D -PW	2	ARVE	C-407-	C-501-4	Saturn Drive	ARVE=Air Release Valve Enclosure (Example xxx-A-PW)
136.	660 - PW	2	ARV	C-407-	C-501-4	Saturn Drive	2" Gate Valve - In Valve Box receives Main V# listed in INDEX (Example xxx-PW)
137.	000	2	ARVE	C-407-	C-501-4	Saturn Drive	ARVE=Air Release Valve Enclosure (Example xxx-A-PW)
138.	660 A - PW	-	ARVE	C-407-	C-501-4	Saturn Drive	ARVE=Air Release Valve Enclosure (Example xxx-A-PW)
139.	660 B - PW	1			C-501-4	Saturn Drive	ARVE=Air Release Valve Enclosure (Example xxx-A-PW)
140.	660 C - PW	2	ARVE	C-407-	C-501-4	Saturi Dive	
141.	660 D - PW	2	ARVE	C-407-	C-501-4	Saturn Drive	ARVE=Air Release Valve Enclosure (Example xxx-A-PW)
142	661 - PW	14	GV	C-407-	C-507-12	Saturn Drive	GV = Gate Valve
142.	662 - PW	12	GV	C-407-	C-507-12	Saturn Drive	GV = Gate Valve
144.	663 - PW	8	GV	C-407-	C-507-13	Saturn Drive	GV = Gate Valve
145.	664 - PW	2	ARV	C-408-	C-501-4	Saturn Drive	2" Gate Valve - In Valve Box receives Main V# listed in INDEX (Example xxx-PW)
146.	664 A - PW	2	ARVE	C-408-	C-501-4	Saturn Drive	ARVE=Air Release Valve Enclosure (Example xxx-A-PW)
147.	664 B - PW	1	ARVE	C-408-	C-501-4	Saturn Drive	ARVE=Air Release Valve Enclosure (Example xxx-A-PW)
148.	664 C - PW	2	ARVE	C-408-	C-501-4		ARVE=Air Release Valve Enclosure (Example xxx-A-PW)
149.	664 D - PW	2	ARVE	C-408-	C-501-4		ARVE=Air Release Valve Enclosure (Example xxx-A-PW)
150.	665 - PW	2	ARV	C-408-	C-501-4	Saturn Drive	2" Gate Valve - In Valve Box receives Main V# listed in INDEX (Example xxx-PW)

Valve ndex#	Valve Number	Valve Size INCHES	Valve Type	Drawing	Plan Detail	Street	Notes
151.	665 A - PW	2	ARVE	C-408-	C-501-4	Saturn Drive	ARVE=Air Release Valve Enclosure (Example xxx-A-PW)
152.	665 B - PW	1	ARVE	C-408-	C-501-4	Saturn Drive	ARVE=Air Release Valve Enclosure (Example xxx-A-PW)
153.	665 C - PW	2	ARVE	C-408-	C-501-4	Saturn Drive	ARVE=Air Release Valve Enclosure (Example xxx-A-PW)
154.	665 D - PW	2	ARVE	C-408-	C-501-4	Saturn Drive	ARVE=Air Release Valve Enclosure (Example xxx-A-PW)
			GV	C-408-		Saturn Drive	GV = Gate Valve
155.	666 - PW	14		C-408-	C-507-14	Saturn Drive	GV = Gate Valve
156.	667 - PW	12	GV	C-400-	C-307-14		2" Gate Valve - In Valve Box receives Main V# listed in INDEX
157.	668 - PW	2	ARV	C-409-	C-501-4	Saturn Drive	(Example xxx-PW)
158.	668 A - PW	2	ARVE	C-409-	C-501-4	Saturn Drive	ARVE=Air Release Valve Enclosure (Example xxx-A-PW)
159.	668 B - PW	1	ARVE	C-409-	C-501-4	Saturn Drive	ARVE=Air Release Valve Enclosure (Example xxx-A-PW)
160.	668 C - PW	2	ARVE	C-409-	C-501-4	Saturn Drive	ARVE=Air Release Valve Enclosure (Example xxx-A-PW)
161.	668 D - PW	2	ARVE	C-409-	C-501-4	Saturn Drive	ARVE=Air Release Valve Enclosure (Example xxx-A-PW)
		16	GV	C-413-	C-509-18	"J" Road	GV = Gate Valve
162.	669 - PW	16		C-413-	C-509-18	"J" Road	GV = Gate Valve
163.	670 - PW	8	GV	C-413-	C-509-17	"J" Road	GV = Gate Valve
164.	671 - PW	14	GV	C-413-	C-303-17		2" Gate Valve - In Valve Box receives Main V# listed in INDEX
165.	672 - PW	2	ARV	C-414-	C-501-4	"J" Road	(Example xxx-PW)
166.	672 A - PW	2	ARVE	C-414-	C-501-4	"j" Road	ARVE=Air Release Valve Enclosure (Example xxx-A-PW)
167.	672 B - PW	1	ARVE	C-414-	C-501-4	"J" Road	ARVE=Air Release Valve Enclosure (Example xxx-A-PW)
168.	672 C - PW	2	ARVE	C-414-	C-501-4	"J" Road	ARVE=Air Release Valve Enclosure (Example xxx-A-PW)
169.	672 D - PW	2	ARVE	C-414-	C-501-4	"J" Road	ARVE=Air Release Valve Enclosure (Example xxx-A-PW)
170	673 - PW	14	GV	C-414-	C-505-7	"J" Road	GV = Gate Valve
170.	674 - PW	8	GV	C-414-	C-505-7	"J" Road	GV = Gate Valve
171.	675 - PW	16	GV	C-414-	C-505-7	"J" Road	GV = Gate Valve
172.	0.0	8	GV	C-414-	C-504-5	"J" Road	GV = Gate Valve
173.		14	GV	C-414-	C-511-23	"J" Road	GV = Gate Valve
174.	011	16	GV	C-414-	C-511-23	"J" Road	GV = Gate Valve
175. 176.	678 - PW 679 - PW	2	ARV	C-415-	C-501-4	Trent Lott Parkway	2" Gate Valve - In Valve Box receives Main V# listed in INDEX (Example xxx-PW)
177.	679 A - PW	2	ARVE	C-415-	C-501-4	Trent Lott Parkway	ARVE=Air Release Valve Enclosure (Example xxx-A-PW)

Valve	Valve Number	Valve Size INCHES	Valve Type	Drawing	Plan Detail	Street	Notes
178.	679 B - PW	1	ARVE	C-415-	C-501-4	Trent Lott Parkway	ARVE=Air Release Valve Enclosure (Example xxx-A-PW)
179.	679 C - PW	2	ARVE	C-415-	C-501-4	Trent Lott Parkway	ARVE=Air Release Valve Enclosure (Example xxx-A-PW)
180.	679 D - PW	2	ARVE	C-415-	C-501-4	Trent Lott Parkway	ARVE=Air Release Valve Enclosure (Example xxx-A-PW)
181.	680 - PW	2	ARV	C-415-	C-501-4	Trent Lott Parkway	2" Gate Valve - In Valve Box receives Main V# listed in INDEX (Example xxx-PW)
182.	680 A - PW	2	ARVE	C-415-	C-501-4	Trent Lott Parkway	ARVE=Air Release Valve Enclosure (Example xxx-A-PW)
183.	680 B - PW	1	ARVE	C-415-	C-501-4	Trent Lott Parkway	ARVE=Air Release Valve Enclosure (Example xxx-A-PW)
184.	680 C - PW	2	ARVE	C-415-	C-501-4	Trent Lott Parkway	ARVE=Air Release Valve Enclosure (Example xxx-A-PW)
185.	680 D - PW	2	ARVE	C-415-	C-501-4	Trent Lott Parkway	ARVE=Air Release Valve Enclosure (Example xxx-A-PW)
		14	GV	C-415-	C-512-24	Trent Lott Parkway	GV = Gate Valve
186.	681 - PW		GV	C-415-	C-512-24	Trent Lott Parkway	GV = Gate Valve
187.	682 - PW	14	GV	C-415-	C-516-2	Trent Lott Parkway	GV = Gate Valve
188.	683 - PW	14	GV	C-415-	C-516-2	Trent Lott Parkway	GV = Gate Valve
189.	684 - PW	14	GV	C-415-	C-516-2	Trent Lott Parkway	GV = Gate Valve
190.	685 - PW	14		C-415-	C-516-2	Trent Lott Parkway	GV = Gate Valve
191.	686 - PW	14	GV	C-415-	C-516-2	Trent Lott Parkway	GV = Gate Valve
192.	687 - PW	14	GV	C-415-	C-310-2	Trent Lott Parkway	GV = Gate Valve
193.	688 - PW	14	GV		-	Trent Lott Parkway	GV = Gate Valve
194.	689 - PW	14	GV	C-417-	_	Trent Lott Parkway	GV = Gate Valve
195.	690 - PW	14	GV	C-417-	C-504-4	Trent Lott Parkway	GV = Gate Valve
196.	691 - PW	16	GV	C-417-	C-504-4	Trent Lott Parkway	GV = Gate Valve
197.	692 - PW	16	GV	C-417-		Trent Lott Parkway	GV = Gate Valve
198.	693 - PW 694 - PW	2	GV	C-417-	C-514A-4 C-501-4	Balch Blvd	2" Gate Valve - In Valve Box receives Main V# listed in INDEX (Example xxx-PW)
199.	695 A - PW	2	ARVE	C-418-	C-501-4	Balch Blvd	ARVE=Air Release Valve Enclosure (Example xxx-A-PW)
200.	695 B - PW	1	ARVE	C-418-	C-501-4	Balch Blvd	ARVE=Air Release Valve Enclosure (Example xxx-A-PW)
201.	695 C - PW	2	ARVE	C-418-	C-501-4	Balch Blvd	ARVE=Air Release Valve Enclosure (Example xxx-A-PW)
203.	695 D - PW	2	ARVE	C-418-	C-501-4	Balch Blvd	ARVE=Air Release Valve Enclosure (Example xxx-A-PW)
204.	696 - PW	2	ARV	C-418-	C-501-4	Balch Blvd	2" Gate Valve - In Valve Box receives Main V# listed in INDEX (Example xxx-PW)
205.	696 A - PW	2	ARVE	C-418-	C-501-4	Balch Blvd	ARVE=Air Release Valve Enclosure (Example xxx-A-PW)

Valve ndex#	Val	ve Number	Valve Size INCHES	Valve Type	Drawing	Plan Detail	Street	Notes
206.	696	B - PW	1	ARVE	C-418-	C-501-4	Balch Blvd	ARVE=Air Release Valve Enclosure (Example xxx-A-PW)
207.	696	C - PW	2	ARVE	C-418-	C-501-4	Balch Blvd	ARVE=Air Release Valve Enclosure (Example xxx-A-PW)
208.		D - PW	2	ARVE	C-418-	C-501-4	Balch Blvd	ARVE=Air Release Valve Enclosure (Example xxx-A-PW)
			-	GV	C-418-	C-514-30	Balch Blvd	GV = Gate Valve
209.	697	- PW	8	GV	C-418-	C-510-19	Balch Blvd	GV = Gate Valve
210.	698	- PW		GV	C-418-	C-513-29	Balch Blvd	GV = Gate Valve
211.	699	- PW	8	GV GV	C-418-	C-506-9	Balch Blvd	GV = Gate Valve
212.	700	- PW	8	-	C-418-	C-518-5	Balch Blvd	GV = Gate Valve
213.	701	- PW	16	GV		C-518-5	Balch Blvd	GV = Gate Valve
214.	702	- PW	14	GV	C-418-	-	Balch Blvd	GV = Gate Valve
215.	703	- PW	14	GV	C-418-	C-518-5	DaiCH DIVU	2" Gate Valve - In Valve Box receives Main V# listed in INDEX
216.	704	- PW	2	ARV	C-419-	C-501-4	Balch Blvd	(Example xxx-PW)
217.	704	A - PW	2	ARVE	C-419-	C-501-4	Balch Blvd	ARVE=Air Release Valve Enclosure (Example xxx-A-PW)
218.	704	B - PW	1	ARVE	C-419-	C-501-4	Balch Blvd	ARVE=Air Release Valve Enclosure (Example xxx-A-PW)
219.	704	C - PW	2	ARVE	C-419-	C-501-4	Balch Blvd	ARVE=Air Release Valve Enclosure (Example xxx-A-PW)
220.	704	D - PW	2	ARVE	C-419-	C-501-4	Balch Blvd	ARVE=Air Release Valve Enclosure (Example xxx-A-PW)
			-	GV	C-419-	C-514-30	Balch Blvd	GV = Gate Valve
221.	705	- PW	8	GV	C-419-	C-514-30	Balch Blvd	GV = Gate Valve
222.	706	- PW	8		C-419-	C-514-30	Balch Blvd	GV = Gate Valve
223.	707	- PW	8	GV		C-514-30	Balch Blvd	GV = Gate Valve
224.	708	- PW	8	GV	C-419-		Balch Blvd	GV = Gate Valve
225.	709	- PW	6	GV	C-419-	C-510-20	Balch Blvd	GV = Gate Valve
226.	710	- PW	16	GV	C-420-	C-517-4		GV = Gate Valve
227.	711	- PW	16	GV	C-420-	C-517-4	Balch Blvd	GV = Gate Valve
228.	712	- PW	16	GV	C-420-	C-517-4	Balch Blvd	2" Gate Valve - In Valve Box receives Main V# listed in INDEX
229.	713	- PW	2	ARV	C-420-	C-501-4	Balch Blvd	(Example xxx-PW)
230.	713	A - PW	2	ARVE	C-420-	C-501-4	Balch Blvd	ARVE=Air Release Valve Enclosure (Example xxx-A-PW)
231.	713	B - PW	1	ARVE	C-420-	C-501-4	Balch Blvd	ARVE=Air Release Valve Enclosure (Example xxx-A-PW)
232.	-	C - PW	2	ARVE	C-420-	C-501-4	Balch Blvd	ARVE=Air Release Valve Enclosure (Example xxx-A-PW)
233.	-	D - PW	2	ARVE	C-420-	C-501-4	Balch Blvd	ARVE=Air Release Valve Enclosure (Example xxx-A-PW)
	74.1	DIAC	16	GV	C-420-	C-511-22	Balch Blvd	GV = Gate Valve
234.	714	- PW	10	GV GV	C-420-	C-511-22	Balch Blvd	GV = Gate Valve

Valve ndex#	Valve Number	Valve Size INCHES	Valve Type	Drawing	Plan Detail	Street	Notes
236.	716 - PW	16	GV	C-420-	C-517-4	Balch Blvd	GV = Gate Valve
237.	717 - PW	16	GV	C-420-	C-504-6	Balch Blvd	GV = Gate Valve
238.	718 - PW	8	GV	C-420-	C-504-6	Balch Blvd	GV = Gate Valve
	719 - PW	8	GV	C-421-	C-505-7	Balch Blvd	GV = Gate Valve
239.	1.22	14	GV	C-421-	C-505-7	Propellant Blvd	GV = Gate Valve
240.	72.0	16	GV	C-421-	C-505-7	Propellant Blvd	GV = Gate Valve
241.	721 - PW 722 - PW	2	ARV	C-421-	C-501-4	Propellant Blvd	2" Gate Valve - In Valve Box receives Main V# listed in INDEX (Example xxx-PW)
243.	722 A - PW	2	ARVE	C-421-	C-501-4	Propellant Blvd	ARVE=Air Release Valve Enclosure (Example xxx-A-PW)
244.	722 B - PW	1	ARVE	C-421-	C-501-4	Propellant Blvd	ARVE=Air Release Valve Enclosure (Example xxx-A-PW)
245.	722 C - PW	2	ARVE	C-421-	C-501-4	Propellant Blvd	ARVE=Air Release Valve Enclosure (Example xxx-A-PW)
246.	722 D - PW	2	ARVE	C-421-	C-501-4	Propellant Blvd	ARVE=Air Release Valve Enclosure (Example xxx-A-PW)
247.	723 - PW	2	ARV	C-422-	C-501-4	Propellant Blvd	2" Gate Valve - In Valve Box receives Main V# listed in INDEX (Example xxx-PW)
248.	723 A - PW	2	ARVE	C-422-	C-501-4	Propellant Blvd	ARVE=Air Release Valve Enclosure (Example xxx-A-PW)
249.	723 B - PW	1	ARVE	C-422-	C-501-4	Propellant Blvd	ARVE=Air Release Valve Enclosure (Example xxx-A-PW)
250.	723 C - PW	2	ARVE	C-422-	C-501-4	Propellant Blvd	ARVE=Air Release Valve Enclosure (Example xxx-A-PW)
251.	723 D - PW	2	ARVE	C-422-	C-501-4	Propellant Blvd	ARVE=Air Release Valve Enclosure (Example xxx-A-PW)
	DIA.	8	GV	C-422-	C-503-2	Propellant Blvd	GV = Gate Valve
252.	724 - PW		GV	C-422-	C-503-2	Propellant Blvd	GV = Gate Valve
253.	725 - PW	6	GV	C-422-	C-503-2	Propellant Blvd	GV = Gate Valve
254.	726 - PW	8	GV	C-422-	C-503-2	Propellant Blvd	GV = Gate Valve
255.	727 - PW	6	GV	C-422-	C-503-1	Propellant Blvd	GV = Gate Valve
256.	728 - PW	3		C-422-	C-422-B	Propellant Blvd	GV = Gate Valve
257.	729 - PW	3	GV	C-423-	C-517-3	Propellant Blvd	GV = Gate Valve
258.	730 - PW	14	GV		C-517-3	Propellant Blvd	GV = Gate Valve
259.	731 - PW	16	GV	C-423-	C-517-3	Propellant Blvd	GV = Gate Valve
260.	732 - PW	16	GV	C-423-	C-31/-3	17 Topellant biva	2" Gate Valve - In Valve Box receives Main V# listed in INDEX
261.	733 - PW	2	ARV	C-424-	C-501-4	NDBC	(Example xxx-PW)
262.	733 A - PW	2	ARVE	C-424-	C-501-4	NDBC	ARVE=Air Release Valve Enclosure (Example xxx-A-PW)
263.	733 B - PW	1	ARVE	C-424-	C-501-4	NDBC	ARVE=Air Release Valve Enclosure (Example xxx-A-PW)
264.	733 C - PW	2	ARVE	C-424-	C-501-4	NDBC	ARVE=Air Release Valve Enclosure (Example xxx-A-PW)

Valve ndex#	Valve Number	Valve Size INCHES	Valve Type	Drawing	Plan Detail	Street	Notes
265.	733 D - PW	2	ARVE	C-424-	C-501-4	NDBC	ARVE=Air Release Valve Enclosure (Example xxx-A-PW)
266.	734 - PW	8	GV	C-424-	C-514-32	NDBC	GV = Gate Valve
267.	735 - PW	12	GV	C-424-	C-514-32	NDBC	GV = Gate Valve
268.	736 - PW	2	ARV	C-425-	C-501-4	NDBC	2" Gate Valve - In Valve Box receives Main V# listed in INDEX (Example xxx-PW)
269.	736 A - PW	2	ARVE	C-425-	C-501-4	NDBC	ARVE=Air Release Valve Enclosure (Example xxx-A-PW)
270.	736 B - PW	1	ARVE	C-425-	C-501-4	NDBC	ARVE=Air Release Valve Enclosure (Example xxx-A-PW)
271.	736 C - PW	2	ARVE	C-425-	C-501-4	NDBC	ARVE=Air Release Valve Enclosure (Example xxx-A-PW)
272.	736 D - PW	2	ARVE	C-425-	C-501-4	NDBC	ARVE=Air Release Valve Enclosure (Example xxx-A-PW)
272	737 - PW	8	GV	C-425-	C-514-31	NDBC	GV = Gate Valve
273.	737 - PW 736 - PW	2	ARV	C-426-	C-501-4	NDBC	2" Gate Valve - In Valve Box receives Main V# listed in INDEX (Example xxx-PW)
275.	736 A - PW	2	ARVE	C-426-	C-501-4	NDBC	ARVE=Air Release Valve Enclosure (Example xxx-A-PW)
276.	736 B - PW	1	ARVE	C-426-	C-501-4	NDBC	ARVE=Air Release Valve Enclosure (Example xxx-A-PW)
277.	736 C - PW	2	ARVE	C-426-	C-501-4	NDBC	ARVE=Air Release Valve Enclosure (Example xxx-A-PW)
278.	736 D - PW	2	ARVE	C-426-	C-501-4	NDBC	ARVE=Air Release Valve Enclosure (Example xxx-A-PW)
		14	GV	C-426-	C-505-36	NDBC	GV = Gate Valve
279.	737 - PW	14	GV	C-426-		NDBC	GV = Gate Valve
280.	738 - PW		GV	C-427-		"H" ROAD	GV = Gate Valve
281.	739 - PW	14	GV	C-427-	+	"H" ROAD	GV = Gate Valve
282.	740 - PW 741 - PW	2	ARV	C-427-	C-501-4	"H" ROAD	2" Gate Valve - In Valve Box receives Main V# listed in INDEX (Example xxx-PW)
284.	741 A - PW	2	ARVE	C-427-	C-501-4	"H" ROAD	ARVE=Air Release Valve Enclosure (Example xxx-A-PW)
285.	741 B - PW	1	ARVE	C-427-	C-501-4	"H" ROAD	ARVE=Air Release Valve Enclosure (Example xxx-A-PW)
286.	741 C - PW	2	ARVE	C-427-	C-501-4	"H" ROAD	ARVE=Air Release Valve Enclosure (Example xxx-A-PW)
287.	741 D - PW	2	ARVE	C-427-	C-501-4	"H" ROAD	ARVE=Air Release Valve Enclosure (Example xxx-A-PW)
288.	742 - PW	2	ARV	C-428-	C-501-4	"H" ROAD	2" Gate Valve - In Valve Box receives Main V# listed in INDEX (Example xxx-PW)
289.	742 A - PW	2	ARVE	C-428-	C-501-4	"H" ROAD	ARVE=Air Release Valve Enclosure (Example xxx-A-PW)

Valve Index#	Valve Number	Valve Size INCHES	Valve Type	Drawing	Plan Detail	Street	Notes
290.	742 B - PW	1	ARVE	C-428-	C-501-4	"H" ROAD	ARVE=Air Release Valve Enclosure (Example xxx-A-PW)
291.	742 C - PW	2	ARVE	C-428-	C-501-4	"H" ROAD	ARVE=Air Release Valve Enclosure (Example xxx-A-PW)
292.	742 D - PW	2	ARVE	C-428-	C-501-4	"H" ROAD	ARVE=Air Release Valve Enclosure (Example xxx-A-PW)
293.	743 - PW	2	ARV	C-429-	C-501-4	Trent Lott Parkway	2" Gate Valve - In Valve Box receives Main V# listed in INDEX (Example xxx-PW)
294.	743 A - PW	2	ARVE	C-429-	C-501-4	Trent Lott Parkway	ARVE=Air Release Valve Enclosure (Example xxx-A-PW)
295.	743 B - PW	1	ARVE	C-429-	C-501-4	Trent Lott Parkway	ARVE=Air Release Valve Enclosure (Example xxx-A-PW)
296.	743 C - PW	2	ARVE	C-429-	C-501-4	Trent Lott Parkway	ARVE=Air Release Valve Enclosure (Example xxx-A-PW)
297.	743 D - PW	2	ARVE	C-429-	C-501-4	Trent Lott Parkway	ARVE=Air Release Valve Enclosure (Example xxx-A-PW)
298.	744 - PW	14	GV	C-429-		Trent Lott Parkway	GV = Gate Valve
299.	743 - PW	2	ARV	C-430-	C-501-4	Trent Lott Parkway	2" Gate Valve - In Valve Box receives Main V# listed in INDEX (Example xxx-PW)
300.	743 A - PW	2	ARVE	C-430-	C-501-4	Trent Lott Parkway	ARVE=Air Release Valve Enclosure (Example xxx-A-PW)
301.	743 B - PW	1	ARVE	C-430-	C-501-4	Trent Lott Parkway	ARVE=Air Release Valve Enclosure (Example xxx-A-PW)
302.	743 C - PW	2	ARVE	C-430-	C-501-4	Trent Lott Parkway	ARVE=Air Release Valve Enclosure (Example xxx-A-PW)
303.	743 D - PW	2	ARVE	C-430-	C-501-4	Trent Lott Parkway	ARVE=Air Release Valve Enclosure (Example xxx-A-PW)
304.	744 - PW	14	GV	C-431-		ENDEAVOUR BLVD	GV = Gate Valve
305.	745 - PW	14	GV	C-431-	C-506-11	ENDEAVOUR BLVD	GV = Gate Valve

SSC-JACOBS)[JACOBS TECHNOLOGY INC (SSC FOSC)] (SSC-JACOBS)[JACOBS TECHNOLOGY INC (SSC FOSC)] From: Monday May 20 2013 12:28 PM Sent: To: [Bastion Technologies, Inc.]; MURRAY, MARIO F. (SSC-QA20); SSC-JACOBS)[JACOBS TECHNOLOGY INC (SSC FOSC)] (SSC-JACOBS)[JACOBS TECHNOLOGY INC (SSC FOSC)]; JACOBS)[JACOBS TECHNOLOGY INC (SSC FOSC)]; Rewis, Mike J. (SSC-QA10); (SSC-JACOBS)[JACOBS TECHNOLOGY INC (SSC FOSC)]; Wheeler, Casey S. (SSC-RA10); Woolridge, Dale A. (SSC-RA10) RE: concurrence Subject: This looks acceptable to me but, a engineer needs to concur. NDT Level III Quality Engineer ----Original Message-----(SSC-JACOBS)[JACOBS TECHNOLOGY INC (SSC FOSC)] Sent: Monday, May 20, 2013 12:07 PM (SSC-JACOBS)[JACOBS TECHNOLOGY INC (SSC FOSC)]; MURRAY, MARIO F. (SSC-QA20); (SSC-JACOBS)[JACOBS TECHNOLOGY INC (SSC FOSC)]; Rewis, Mike J. (SSC-QA10); (SSC-JACOBS)[JACOBS TECHNOLOGY INC (SSC FOSC)]; TECHNOLOGY INC (SSC FOSC)]; (b)(6) Wheeler, Casey S. (SSC-RA10); Woolridge, Dale A. (SSC-RA10)

Subject: concurrence Importance: High

I need concurrence for the attached FCR 010 for CCB to get ready to go to contractor for cost and schedule.

Thanks

(b)(6)

(b)(6) SSC-JACOBS)[JACOBS TECHNOLOGY INC (SSC FOSC)]

From: Sent: (b)(6) (SSC-BASTIONTECH)[Bastion Technologies, Inc.]

Monday, May 20, 2013 3:15 PM

To:

(b)(6)

TECHNOLOGY INC (SSC FOSC)]; MURRAY, MARIO F. (SSC-QA20); (b)

(b)(6)

(SSC-JACOBS)[JACOBS TECHNOLOGY INC (SSC FOSC)]; Rewis, Mike J. (SSC-QA10); (b)(6) SSC-JACOBS)[JACOBS TECHNOLOGY INC (SSC FOSC)]; Wheeler,

Casey S. (SSC-RA10); Woolridge, Dale A. (SSC-RA10)

Subject:

RE: concurrence

I concur.

Respectfully,

(b)(c)

<u>d)(d)</u>

----Original Message----

From: (b)(6) (SSC-JACOBS)[JACOBS TECHNOLOGY INC (SSC FOSC)]

Sent: Monday, May 20, 2013 12:07 PM

(b)(6)

(b)(6) (SSC-JACOBS)[JACOBS TECHNOLOGY INC (SSC FOSC)]; MURRAY, MARIO F. (SSC-OA20):

(b)(6) (SSC-JACOBS)[JACOBS TECHNOLOGY INC (SSC FOSC)]; (b)(6)

(SSC-JACOBS)[JACOBS TECHNOLOGY INC (SSC FOSC)]; (b)(6) (SSC-JACOBS)[JACOBS

TECHNOLOGY INC (SSC FOSC)]; Rewis, Mike J. (SSC-QA10); (b)(6) (SSC-JACOBS)[JACOBS

TECHNOLOGY INC (SSC FOSC)]; (b)(6) (SSC-JACOBS)[JACOBS TECHNOLOGY INC (SSC FOSC)];

Wheeler, Casey S. (SSC-RA10); Woolridge, Dale A. (SSC-RA10)

Subject: concurrence Importance: High

I need concurrence for the attached FCR 010 for CCB to get ready to go to contractor for cost and schedule.

Thanks

(b)(6)

National Aeronautics and Space Administration John C. Stennis Space Center Stennis Space Center, MS 39529-6000

FIELD CHANGE REQUEST (FCR) (IMPLEMENTED BY SSTD 8070-0001-CONFIG) FCR No NNS12AA95T-010 Contractor Sauer Contract No. NNS12AA95T Initiator/Company Jacobs EMI No. 11B315-01 Spec./Section n/a Drawing No. ref. valve schedule b'alcocal. Date 5/17/2013 Description of problem and recommended change: Potable Water System Upgrades The contract documents do not have requirements to label the underground valves. Contractor to label each underground valve as follows - each valve tag to be stamped according to the attached referenced valve schedule. Tags shall be 2x4x1/16" engraved or stamped with the number indicated on the attached schedule. Tags and fasteners shall be made of brass or stainless steel. Text shall be "sans serif" font, letters shall be 1/2" tall. Sample tag shall be provided to the government for approval. AHA not required for this work. Cost Impact Yes Not to Exceed Schedule Impact X No Yes No. of Days **Project Manager** Date DISPOSITION (NASA) **Evaluation:** PROJECT MANAGER CONCUR CCB CHAIRMAN CALL **Construction Engineer Date Quality Engineer** Date Safety Engineer CCB Approved for Implementation COTR

Date

Contracting Officer

National Aeronautics and Space Administration John C. Stennis Space Center Stennis Space Center, MS 39529-6000

FIELD CHANGE REQUEST (FCR) (IMPLEMENTED BY SSTD 8070-0001-CONFIG)

FCR No NNS12AA95T-010

Contractor	Sauer		Contract No.	NNS12AA95T
Initiator/Company	(b)(6)	Jacobs	EMI No.	11B315-01
Spec./Section	n/a		Drawing No.	ref. valve schedule
		A	Date	5/17/2013
Description of prob Potable Water Syst		ommended change: s		
The contract docu	ments do no	t have requirements	to label the undergroun	d valves.
Contractor to label the attached refere			ws - each valve tag to b	e stamped according to
Tags and fasteners	shall be ma	de of brass or stainle	he number indicated on ess steel. Text shall be se government for appro	the attached schedule. "sans serif" font, letters eval.
AHA not required for	or this work			
Cost Impact	☐ No	Yes	Not to Exceed	
Schedule Impact	☐ No	Yes	No. of Days	
Project Manager			Date	
		DISPOSITIO	N (NASA)	
Evaluation:				
Construction Engineer			Date	
Quality Engineer	Expension of the Control of the Cont		Date	
Safety Engineer			Date	
CCB Approved for Impler	mentation	Yes No		
COTR			Date	
Contracting Office	r		Date	

Valve Index #	Valve Number	Valve Size INCHES	Valve Type	Drawing	Plan Detail	Street	Notes
1.	600 - PW	16	GV	C-401-	C-515-1	Saturn Drive	GV = Gate Valve
2.	601 - PW	14	GV	C-401-	C-515-1	Saturn Drive	GV = Gate Valve
3.	602 - PW	16	GV	C-401-	C-515-1	Saturn Drive	GV = Gate Valve
4.	603 - PW	14	GV	C-401-	C-515-1	Saturn Drive	GV = Gate Valve
5.	604 - PW	8	GV	C-401-	C-504-3	Saturn Drive	GV = Gate Valve
6.	.605 - PW	8	GV	C-401-	C-504-3	Saturn Drive	GV = Gate Valve
7.	606 - PW	2	ARV	C-401-	C-501-4	Saturn Drive	2" Gate Valve - In Valve Box receives Main V# listed in INDEX (Example xxx-PW)
8.	606 A - PW	2	ARVE	C-401-	C-501-4	Saturn Drive	ARVE=Air Release Valve Enclosure (Example xxx-A-PW)
9.	606 B - PW	1	ARVE	C-401-	C-501-4	Saturn Drive	ARVE=Air Release Valve Enclosure (Example xxx-A-PW)
10.	606 C - PW	2	ARVE	C-401-	C-501-4	Saturn Drive	ARVE=Air Release Valve Enclosure (Example xxx-A-PW)
11.	606 D - PW	2	ARVE	C-401-	C-501-4	Saturn Drive	ARVE=Air Release Valve Enclosure (Example xxx-A-PW)
12.	607 - PW	2	ARV	C-401-	C-501-4	Saturn Drive	2" Gate Valve - In Valve Box receives Main V# listed in INDEX (Example xxx-PW)
13.	607 A - PW	2	ARVE	C-401-	C-501-4	Saturn Drive	ARVE=Air Release Valve Enclosure (Example xxx-A-PW)
14.	607 B - PW	1	ARVE	C-401-	C-501-4	Saturn Drive	ARVE=Air Release Valve Enclosure (Example xxx-A-PW)
15.	607 C - PW	2	ARVE	C-401-	C-501-4	Saturn Drive	ARVE=Air Release Valve Enclosure (Example xxx-A-PW)
16.	607 D - PW	2	ARVE	C-401-	C-501-4	Saturn Drive	ARVE=Air Release Valve Enclosure (Example xxx-A-PW)
17.	608 - PW	14	GV	C-410-	C-516-2	"J" Road	GV = Gate Valve
18.	609 - PW	14	GV	C-410-	C-516-2	"J" Road	GV = Gate Valve
19.	610 - PW	14	GV	C-410-	C-516-2	"J" Road	GV = Gate Valve
20.	611 - PW	2	ARV	C-410-	C-501-4	"J" Road	2" Gate Valve - In Valve Box receives Main V# listed in INDEX (Example xxx-PW)
21.	611 A - PW	2	ARVE	C-410-	C-501-4	"J" Road	ARVE=Air Release Valve Enclosure (Example xxx-A-PW)
22.	611 B - PW	1	ARVE	C-410-	C-501-4	"J" Road	ARVE=Air Release Valve Enclosure (Example xxx-A-PW)
23.	611 C - PW	2	ARVE	C-410-	C-501-4	"J" Road	ARVE=Air Release Valve Enclosure (Example xxx-A-PW)
24.	611 D - PW	2	ARVE	C-410-	C-501-4	"J" Road	ARVE=Air Release Valve Enclosure (Example xxx-A-PW)
25.	612 - PW	2	ARV	C-410-	C-501-4	"J" Road	2" Gate Valve - In Valve Box receives Main V# listed in INDEX (Example xxx-PW)
26.	612 A - PW	2	ARVE	C-410-	C-501-4	"J" Road	ARVE=Air Release Valve Enclosure (Example xxx-A-PW)

Valve Index #	Valve Number	Valve Size INCHES	Valve Type	Drawing	Plan Detail	Street	Notes
27.	612 B - PW	1	ARVE	C-410-	C-501-4	"J" Road	ARVE=Air Release Valve Enclosure (Example xxx-A-PW)
28.	612 C - PW	2	ARVE	C-410-	C-501-4	"J" Road	ARVE=Air Release Valve Enclosure (Example xxx-A-PW)
29.	612 D - PW	2	ARVE	C-410-	C-501-4	"J" Road	ARVE=Air Release Valve Enclosure (Example xxx-A-PW)
30.	613 - PW	14	GV	C-410-	C-516-2	"J" Road	GV = Gate Valve
31.	614 - PW	14	GV	C-410-	C-516-2	"J" Road	GV = Gate Valve
32.	615 - PW	8	GV	C-410-	C-513-26	"J" Road	GV = Gate Valve
33.	616 - PW	14	GV	C-410-	C-516-2	"J" Road	GV = Gate Valve
34.	617 - PW	14	GV	C-410-	C-516-2	"J" Road	GV = Gate Valve
35.	618 - PW	2	ARV	C-411-	C-501-4	"J" Road	2" Gate Valve - In Valve Box receives Main V# listed in INDEX (Example xxx-PW)
36.	618 A - PW	2	ARVE	C-411-	C-501-4	"J" Road	ARVE=Air Release Valve Enclosure (Example xxx-A-PW)
37.	618 B - PW	1	ARVE	C-411-	C-501-4	"J" Road	ARVE=Air Release Valve Enclosure (Example xxx-A-PW)
38.	618 C - PW	2	ARVE	C-411-	C-501-4	"J" Road	ARVE=Air Release Valve Enclosure (Example xxx-A-PW)
39.	618 D - PW	2	ARVE	C-411-	C-501-4	"J" Road	ARVE=Air Release Valve Enclosure (Example xxx-A-PW)
40.	619 - PW	2	ARV	C-411-	C-501-4	"J" Road	2" Gate Valve - In Valve Box receives Main V# listed in INDEX (Example xxx-PW)
41.	619 A - PW	2	ARVE	C-411-	C-501-4	"J" Road	ARVE=Air Release Valve Enclosure (Example xxx-A-PW)
42.	619 B - PW	1	ARVE	C-411-	C-501-4	"J" Road	ARVE=Air Release Valve Enclosure (Example xxx-A-PW)
43.	619 C - PW	2	ARVE	C-411-	C-501-4	"J" Road	ARVE=Air Release Valve Enclosure (Example xxx-A-PW)
44.	619 D - PW	2	ARVE	C-411-	C-501-4	"J" Road	ARVE=Air Release Valve Enclosure (Example xxx-A-PW)
45.	620 - PW	14	GV	C-411-	-	"J" Road	GV = Gate Valve
46.	621 - PW	8	GV	C-411-	C-508-15	"J" Road	GV = Gate Valve
47.	622 - PW	12	GV	C-411-	C-508-15	"J" Road	GV = Gate Valve
48.	623 - PW	14	GV	C-412-	C-509-16	"J" Road	GV = Gate Valve
49.	624 - PW	14	GV	C-412-	C-505-36	"J" Road	GV = Gate Valve
50.	625 - PW	14	GV	C-412-	C-518-5	"J" Road	GV = Gate Valve
51.	626 - PW	14	GV	C-412-	C-518-5	"J" Road	GV = Gate Valve
52.	627 - PW	16	GV	C-412-	C-518-5	"J" Road	GV = Gate Valve
53.	628 - PW	2	ARV	C-412-	C-501-4	"J" Road	2" Gate Valve - In Valve Box receives Main V# listed in INDEX (Example xxx-PW)
54.	628 A - PW	2	ARVE	C-412-	C-501-4	"J" Road	ARVE=Air Release Valve Enclosure (Example xxx-A-PW)

Valve Index #	Valve Number	Valve Size INCHES	Valve Type	Drawing	Plan Detail	Street	Notes
55.	628 B - PW	1	ARVE	C-412-	C-501-4	"J" Road	ARVE=Air Release Valve Enclosure (Example xxx-A-PW)
56.	628 C - PW	2	ARVE	C-412-	C-501-4	"J" Road	ARVE=Air Release Valve Enclosure (Example xxx-A-PW)
57.	628 D - PW	2	ARVE	C-412-	C-501-4	"J" Road	ARVE=Air Release Valve Enclosure (Example xxx-A-PW)
58.	629 - PW	2	ARV	C-412-	C-501-4	"J" Road	2" Gate Valve - In Valve Box receives Main V# listed in INDEX (Example xxx-PW)
59.	629 A - PW	2	ARVE	C-412-	C-501-4	"J" Road	ARVE=Air Release Valve Enclosure (Example xxx-A-PW)
60.	629 B - PW	1	ARVE	C-412-	C-501-4	"J" Road	ARVE=Air Release Valve Enclosure (Example xxx-A-PW)
61.	629 C - PW	2	ARVE	C-412-	C-501-4	"J" Road	ARVE=Air Release Valve Enclosure (Example xxx-A-PW)
62.	629 D - PW	2	ARVE	C-412-	C-501-4	"J" Road	ARVE=Air Release Valve Enclosure (Example xxx-A-PW)
63.	630 - PW	2	ARV	C-412-	C-501-4	"J" Road	2" Gate Valve - In Valve Box receives Main V# listed in INDEX (Example xxx-PW)
64.	630 A - PW	2	ARVE	C-412-	C-501-4	"J" Road	ARVE=Air Release Valve Enclosure (Example xxx-A-PW)
65.	630 B - PW	1	ARVE	C-412-	C-501-4	"J" Road	ARVE=Air Release Valve Enclosure (Example xxx-A-PW)
66.	630 C - PW	2	ARVE	C-412-	C-501-4	"J" Road	ARVE=Air Release Valve Enclosure (Example xxx-A-PW)
67.	630 D - PW	2	ARVE	C-412-	C-501-4	"J" Road	ARVE=Air Release Valve Enclosure (Example xxx-A-PW)
68.	631 - PW	2	ARV	C-402-	C-501-4	Saturn Drive	2" Gate Valve - In Valve Box receives Main V# listed in INDEX (Example xxx-PW)
69.	631 A - PW	2	ARVE	C-402-	C-501-4	Saturn Drive	ARVE=Air Release Valve Enclosure (Example xxx-A-PW)
70.	631 B - PW	1	ARVE	C-402-	C-501-4	Saturn Drive	ARVE=Air Release Valve Enclosure (Example xxx-A-PW)
71.	631 C - PW	2	ARVE	C-402-	C-501-4	Saturn Drive	ARVE=Air Release Valve Enclosure (Example xxx-A-PW)
72.	631 D - PW	2	ARVE	C-402-	C-501-4	Saturn Drive	ARVE=Air Release Valve Enclosure (Example xxx-A-PW)
73.	632 - PW	8	GV	C-402-	C-514-30	Saturn Drive	GV = Gate Valve
74.	633 - PW	16	GV	C-403-	C-517-4	Saturn Drive	GV = Gate Valve
75.	634 - PW	16	GV	C-403-	C-517-4	Saturn Drive	GV = Gate Valve
76.	635 - PW	16	GV	C-403-	C-517-4	Saturn Drive	GV = Gate Valve
77.	636 - PW	16	GV	C-403-	C-517-4	Saturn Drive	GV = Gate Valve
78.	637 - PW	6	GV	C-403-	C-512-37	Saturn Drive	GV = Gate Valve

Valve Index #	Valve Number	Valve Size INCHES	Valve Type	Drawing	Plan Detail	Street	Notes
79.	638 - PW	2	ARV	C-403-	C-501-4	Saturn Drive	2" Gate Valve - In Valve Box receives Main V# listed in INDEX (Example xxx-PW)
80.	638 A - PW	2	ARVE	C-403-	C-501-4	Saturn Drive	ARVE=Air Release Valve Enclosure (Example xxx-A-PW)
81.	638 B - PW	1	ARVE	C-403-	C-501-4	Saturn Drive	ARVE=Air Release Valve Enclosure (Example xxx-A-PW)
82.	638 C - PW	2	ARVE	C-403-	C-501-4	Saturn Drive	ARVE=Air Release Valve Enclosure (Example xxx-A-PW)
83.	638 D - PW	2	ARVE	C-403-	C-501-4	Saturn Drive	ARVE=Air Release Valve Enclosure (Example xxx-A-PW)
84.	639 - PW	2	ARV	C-403-	C-501-4	Saturn Drive	2" Gate Valve - In Valve Box receives Main V# listed in INDEX (Example xxx-PW)
85.	639 A - PW	2	ARVE	C-403-	C-501-4	Saturn Drive	ARVE=Air Release Valve Enclosure (Example xxx-A-PW)
86.	639 B - PW	1	ARVE	C-403-	C-501-4	Saturn Drive	ARVE=Air Release Valve Enclosure (Example xxx-A-PW)
87.	639 C - PW	2	ARVE	C-403-	C-501-4	Saturn Drive	ARVE=Air Release Valve Enclosure (Example xxx-A-PW)
88.	639 D - PW	2	ARVE	C-403-	C-501-4	Saturn Drive	ARVE=Air Release Valve Enclosure (Example xxx-A-PW)
89.	640 - PW	2	ARV	C-404-	C-501-4	Saturn Drive	2" Gate Valve - In Valve Box receives Main V# listed in INDEX (Example xxx-PW)
90.	640 A - PW	2	ARVE	C-404-	C-501-4	Saturn Drive	ARVE=Air Release Valve Enclosure (Example xxx-A-PW)
91.	640 B - PW	1	ARVE	C-404-	C-501-4	Saturn Drive	ARVE=Air Release Valve Enclosure (Example xxx-A-PW)
92.	640 C - PW	2	ARVE	C-404-	C-501-4	Saturn Drive	ARVE=Air Release Valve Enclosure (Example xxx-A-PW)
93.	640 D - PW	2	ARVE	C-404-	C-501-4	Saturn Drive	ARVE=Air Release Valve Enclosure (Example xxx-A-PW)
94.	641 - PW	16	GV	C-404-		Saturn Drive	GV = Gate Valve
95.	642 - PW	14	GV	C-404-		Saturn Drive	GV = Gate Valve
96.	643 - PW	12	GV	C-404-	C-514-34	Saturn Drive	GV = Gate Valve
97.	644 - PW	2	ARV	C-405-	C-501-4	Saturn Drive	2" Gate Valve - In Valve Box receives Main V# listed in INDEX (Example xxx-PW)
98.	644 A - PW	2	ARVE	C-405-	C-501-4	Saturn Drive	ARVE=Air Release Valve Enclosure (Example xxx-A-PW)
99.	644 B - PW	1	ARVE	C-405-	C-501-4	Saturn Drive	ARVE=Air Release Valve Enclosure (Example xxx-A-PW)
100.	644 C - PW	· 2	ARVE	C-405-	C-501-4	Saturn Drive	ARVE=Air Release Valve Enclosure (Example xxx-A-PW)
101.	644 D - PW	2	ARVE	C-405-	C-501-4	Saturn Drive	ARVE=Air Release Valve Enclosure (Example xxx-A-PW)

Valve Index #	Valve Number	Valve Size INCHES	Valve Type	Drawing	Plan Detail	Street	Notes
102.	645 - PW	2	ARV	C-405-	C-501-4	Saturn Drive	2" Gate Valve - In Valve Box receives Main V# listed in INDEX (Example xxx-PW)
103.	645 A - PW	2	ARVE	C-405-	C-501-4	Saturn Drive	ARVE=Air Release Valve Enclosure (Example xxx-A-PW)
104.	645 B - PW	1	ARVE	C-405-	C-501-4	Saturn Drive	ARVE=Air Release Valve Enclosure (Example xxx-A-PW)
105.	645 C - PW	2	ARVE	C-405-	C-501-4	Saturn Drive	ARVE=Air Release Valve Enclosure (Example xxx-A-PW)
106.	645 D - PW	2	ARVE	C-405-	C-501-4	Saturn Drive	ARVE=Air Release Valve Enclosure (Example xxx-A-PW)
107.	646 - PW	14	GV	C-405-	C-513-28	Saturn Drive	GV = Gate Valve
108.	647 - PW	14	GV	C-405-	C-513-28	Saturn Drive	GV = Gate Valve
109.	648 - PW	14	GV	C-405-	C-513-28	Saturn Drive	GV = Gate Valve
110.	649 - PW	14	GV	C-405-	C-517-3	Saturn Drive	GV = Gate Valve
111.	650 - PW	16	GV	C-405-	C-517-3	Saturn Drive	GV = Gate Valve
112.	651 - PW	16	GV	C-405-	C-517-3	Saturn Drive	GV = Gate Valve
113.	652 - PW	2	ARV	C-406-	C-501-4	Saturn Drive	2" Gate Valve - In Valve Box receives Main V# listed in INDEX (Example xxx-PW)
114.	652 A - PW	2	ARVE	C-406-	C-501-4	Saturn Drive	ARVE=Air Release Valve Enclosure (Example xxx-A-PW)
115.	652 B - PW	1	ARVE	C-406-	C-501-4	Saturn Drive	ARVE=Air Release Valve Enclosure (Example xxx-A-PW)
116.	652 C - PW	2	ARVE	C-406-	C-501-4	Saturn Drive	ARVE=Air Release Valve Enclosure (Example xxx-A-PW)
117.	652 D - PW	2	ARVE	C-406-	C-501-4	Saturn Drive	ARVE=Air Release Valve Enclosure (Example xxx-A-PW)
118.	653 - PW	2	ARV	C-406-	C-501-4	Saturn Drive	2" Gate Valve - In Valve Box receives Main V# listed in INDEX (Example xxx-PW)
119.	653 A - PW	2	ARVE	C-406-	C-501-4	Saturn Drive	ARVE=Air Release Valve Enclosure (Example xxx-A-PW)
120.	653 B - PW	1	ARVE	C-406-	C-501-4	Saturn Drive	ARVE=Air Release Valve Enclosure (Example xxx-A-PW)
121.	653 C - PW	2	ARVE	C-406-	C-501-4	Saturn Drive	ARVE=Air Release Valve Enclosure (Example xxx-A-PW)
122.	653 D - PW	2	ARVE	C-406-	C-501-4	Saturn Drive	ARVE=Air Release Valve Enclosure (Example xxx-A-PW)
123.	654 - PW	14	GV	C-406-		Saturn Drive	GV = Gate Valve
124.	655 - PW	8	GV	C-406-	C-505-8	Saturn Drive	GV = Gate Valve
125.	656 - PW	8	GV	C-406-	C-505-8	Saturn Drive	GV = Gate Valve
126.	657 - PW	8	GV	C-406-	C-506-35	Saturn Drive	GV = Gate Valve
127.	658 - PW	2	ARV	C-407-	C-501-4	Saturn Drive	2" Gate Valve - In Valve Box receives Main V# listed in INDEX (Example xxx-PW)

Valve Index #	Valve Number	Valve Size INCHES	Valve Type	Drawing	Plan Detail	Street	Notes
128.	658 A - PW	2	ARVE	C-407-	C-501-4	Saturn Drive	ARVE=Air Release Valve Enclosure (Example xxx-A-PW)
129.	658 B - PW	1	ARVE	C-407-	C-501-4	Saturn Drive	ARVE=Air Release Valve Enclosure (Example xxx-A-PW)
130.	658 C - PW	2	ARVE	C-407-	C-501-4	Saturn Drive	ARVE=Air Release Valve Enclosure (Example xxx-A-PW)
131.	658 D - PW	2	ARVE	C-407-	C-501-4	Saturn Drive	ARVE=Air Release Valve Enclosure (Example xxx-A-PW)
132.	659 - PW	2	ARV	C-407-	C-501-4	Saturn Drive	2" Gate Valve - In Valve Box receives Main V# listed in INDEX (Example xxx-PW)
133.	659 A - PW	2	ARVE	C-407-	C-501-4	Saturn Drive	ARVE=Air Release Valve Enclosure (Example xxx-A-PW)
134.	659 B - PW	1	ARVE	C-407-	C-501-4	Saturn Drive	ARVE=Air Release Valve Enclosure (Example xxx-A-PW)
135.	659 C - PW	2	ARVE	C-407-	C-501-4	Saturn Drive	ARVE=Air Release Valve Enclosure (Example xxx-A-PW)
136.	659 D - PW	2	ARVE	C-407-	C-501-4	Saturn Drive	ARVE=Air Release Valve Enclosure (Example xxx-A-PW)
137.	660 - PW	2	ARV	C-407-	C-501-4	Saturn Drive	2" Gate Valve - In Valve Box receives Main V# listed in INDEX (Example xxx-PW)
138.	660 A - PW	2	ARVE	C-407-	C-501-4	Saturn Drive	ARVE=Air Release Valve Enclosure (Example xxx-A-PW)
139.	660 B - PW	1	ARVE	C-407-	C-501-4	Saturn Drive	ARVE=Air Release Valve Enclosure (Example xxx-A-PW)
140.	660 C - PW	2	ARVE	C-407-	C-501-4	Saturn Drive	ARVE=Air Release Valve Enclosure (Example xxx-A-PW)
141.	660 D - PW	2	ARVE	C-407-	C-501-4	Saturn Drive	ARVE=Air Release Valve Enclosure (Example xxx-A-PW)
142.	661 - PW	14	GV	C-407-	C-507-12	Saturn Drive	GV = Gate Valve
143.	662 - PW	12	GV	C-407-	C-507-12	Saturn Drive	GV = Gate Valve
144.	663 - PW	8	GV	C-407-	C-507-13	Saturn Drive	GV = Gate Valve
145.	664 - PW	2	ARV	C-408-	C-501-4	Saturn Drive	2" Gate Valve - In Valve Box receives Main V# listed in INDEX (Example xxx-PW)
146.	664 A - PW	2	ARVE	C-408-	C-501-4	Saturn Drive	ARVE=Air Release Valve Enclosure (Example xxx-A-PW)
147.	664 B - PW	1	ARVE	C-408-	C-501-4	Saturn Drive	ARVE=Air Release Valve Enclosure (Example xxx-A-PW)
148.	664 C - PW	2	ARVE	C-408-	C-501-4		ARVE=Air Release Valve Enclosure (Example xxx-A-PW)
149.	664 D - PW	2	ARVE	C-408-	C-501-4		ARVE=Air Release Valve Enclosure (Example xxx-A-PW)
150.	665 - PW	2	ARV	C-408-	C-501-4	Saturn Drive	2" Gate Valve - In Valve Box receives Main V# listed in INDEX (Example xxx-PW)

Valve Index #	Valve Number	Valve Size INCHES	Valve Type	Drawing	Plan Detail	Street	Notes
151.	665 A - PW	2	ARVE	C-408-	C-501-4	Saturn Drive	ARVE=Air Release Valve Enclosure (Example xxx-A-PW)
152.	665 B - PW	1	ARVE	C-408-	C-501-4	Saturn Drive	ARVE=Air Release Valve Enclosure (Example xxx-A-PW)
153.	665 C - PW	2	ARVE	C-408-	C-501-4	Saturn Drive	ARVE=Air Release Valve Enclosure (Example xxx-A-PW)
154.	665 D - PW	2	ARVE	C-408-	C-501-4	Saturn Drive	ARVE=Air Release Valve Enclosure (Example xxx-A-PW)
155.	666 - PW	14	GV	C-408-		Saturn Drive	GV = Gate Valve
156.	667 - PW	12	GV	C-408-	C-507-14	Saturn Drive	GV = Gate Valve
157.	668 - PW	2	ARV	C-409-	C-501-4	Saturn Drive	2" Gate Valve - In Valve Box receives Main V# listed in INDEX (Example xxx-PW)
158.	668 A - PW	2	ARVE	C-409-	C-501-4	Saturn Drive	ARVE=Air Release Valve Enclosure (Example xxx-A-PW)
159.	668 B - PW	1	ARVE	C-409-	C-501-4	Saturn Drive	ARVE=Air Release Valve Enclosure (Example xxx-A-PW)
160.	668 C - PW	2	ARVE	C-409-	C-501-4	Saturn Drive	ARVE=Air Release Valve Enclosure (Example xxx-A-PW)
161.	668 D - PW	2	ARVE	C-409-	C-501-4	Saturn Drive	ARVE=Air Release Valve Enclosure (Example xxx-A-PW)
162.	669 - PW	16	GV	C-413-	C-509-18	"J" Road	GV = Gate Valve
163.	670 - PW	8	GV	C-413-	C-509-18	"J" Road	GV = Gate Valve
164.	671 - PW	14	GV	C-413-	C-509-17	"J" Road	GV = Gate Valve
165.	672 - PW	2	ARV	C-414-	C-501-4	"J" Road	2" Gate Valve - In Valve Box receives Main V# listed in INDEX (Example xxx-PW)
166.	672 A - PW	2	ARVE	C-414-	C-501-4	"J" Road	ARVE=Air Release Valve Enclosure (Example xxx-A-PW)
167.	672 B - PW	1	ARVE	C-414-	C-501-4	"J" Road	ARVE=Air Release Valve Enclosure (Example xxx-A-PW)
168.	672 C - PW	2	ARVE	C-414-	C-501-4	"J" Road	ARVE=Air Release Valve Enclosure (Example xxx-A-PW)
169.	672 D - PW	2	ARVE	C-414-	C-501-4	"J" Road	ARVE=Air Release Valve Enclosure (Example xxx-A-PW)
170.	673 - PW	14	GV	C-414-	C-505-7	"J" Road	GV = Gate Valve
171.	674 - PW	8	GV	C-414-	C-505-7	"J" Road	GV = Gate Valve
172.	675 - PW	16	GV	C-414-	C-505-7	"J" Road	GV = Gate Valve
173.	676 - PW	8	GV	C-414-	C-504-5	"J" Road	GV = Gate Valve
174.	677 - PW	14	GV	C-414-	C-511-23	"J" Road	GV = Gate Valve
175.	678 - PW	16	GV	C-414-	C-511-23	"J" Road	GV = Gate Valve
176.	679 - PW	2	ARV	C-415-	C-501-4	Trent Lott Parkway	2" Gate Valve - In Valve Box receives Main V# listed in INDEX (Example xxx-PW)
177.	679 A - PW	2	ARVE	C-415-	C-501-4	Trent Lott Parkway	ARVE=Air Release Valve Enclosure (Example xxx-A-PW)

Valve Index#	Valve Number	Valve Size INCHES	Valve Type	Drawing	Plan Detail	Street	Notes
178.	679 B - PW	1	ARVE	C-415-	C-501-4	Trent Lott Parkway	ARVE=Air Release Valve Enclosure (Example xxx-A-PW)
179.	679 C - PW	2	ARVE	C-415-	C-501-4	Trent Lott Parkway	ARVE=Air Release Valve Enclosure (Example xxx-A-PW)
180.	679 D - PW	2	ARVE	C-415-	C-501-4	Trent Lott Parkway	ARVE=Air Release Valve Enclosure (Example xxx-A-PW)
181.	680 - PW	2	ARV	C-415-	C-501-4	Trent Lott Parkway	2" Gate Valve - In Valve Box receives Main V# listed in INDEX (Example xxx-PW)
182.	680 A - PW	2	ARVE	C-415-	C-501-4	Trent Lott Parkway	ARVE=Air Release Valve Enclosure (Example xxx-A-PW)
183.	680 B - PW	1	ARVE	C-415-	C-501-4	Trent Lott Parkway	ARVE=Air Release Valve Enclosure (Example xxx-A-PW)
184.	680 C - PW	2	ARVE	C-415-	C-501-4	Trent Lott Parkway	ARVE=Air Release Valve Enclosure (Example xxx-A-PW)
185.	680 D - PW	2	ARVE	C-415-	C-501-4	Trent Lott Parkway	ARVE=Air Release Valve Enclosure (Example xxx-A-PW)
186.	681 - PW	14	GV	C-415-	C-512-24	Trent Lott Parkway	GV = Gate Valve
187.	682 - PW	14	GV	C-415-	C-512-24	Trent Lott Parkway	GV = Gate Valve
188.	683 - PW	14	GV	C-415-	C-516-2	Trent Lott Parkway	GV = Gate Valve
189.	684 - PW	14	GV	C-415-	C-516-2	Trent Lott Parkway	GV = Gate Valve
190.	685 - PW	14	GV	C-415-	C-516-2	Trent Lott Parkway	GV = Gate Valve
191.	686 - PW	14	GV	C-415-	C-516-2	Trent Lott Parkway	GV = Gate Valve
192.	687 - PW	14	GV	C-415-	C-516-2	Trent Lott Parkway	GV = Gate Valve
193.	688 - PW	14	GV	C-416-		Trent Lott Parkway	GV = Gate Valve
194.	689 - PW	14	GV	C-417-		Trent Lott Parkway	GV = Gate Valve
195.	690 - PW	14	GV	C-417-		Trent Lott Parkway	GV = Gate Valve
196.	691 - PW	16	GV	C-417-	C-504-4	Trent Lott Parkway	GV = Gate Valve
197.	692 - PW	16	GV	C-417-	C-504-4	Trent Lott Parkway	GV = Gate Valve
198.	693 - PW	14	GV	C-417-	C-514A-4	Trent Lott Parkway	GV = Gate Valve
199.	694 - PW	2	ARV	C-418-	C-501-4	Balch Blvd	2" Gate Valve - In Valve Box receives Main V# listed in INDEX (Example xxx-PW)
200.	695 A - PW	2	ARVE	C-418-	C-501-4	Balch Blvd	ARVE=Air Release Valve Enclosure (Example xxx-A-PW)
201.	695 B - PW	1	ARVE	C-418-	C-501-4	Balch Blvd	ARVE=Air Release Valve Enclosure (Example xxx-A-PW)
202.	695 C - PW	2	ARVE	C-418-	C-501-4	Balch Blvd	ARVE=Air Release Valve Enclosure (Example xxx-A-PW)
203.	695 D - PW	2	ARVE	C-418-	C-501-4	Balch Blvd	ARVE=Air Release Valve Enclosure (Example xxx-A-PW)
204.	696 - PW	2	ARV	C-418-	C-501-4	Balch Blvd	2" Gate Valve - In Valve Box receives Main V# listed in INDEX (Example xxx-PW)
205.	696 A - PW	2	ARVE	C-418-	C-501-4	Balch Blvd	ARVE=Air Release Valve Enclosure (Example xxx-A-PW)

Valve Index #	Valve Number	Valve Size INCHES	Valve Type	Drawing	Plan Detail	Street	Notes
206.	696 B - PW	1	ARVE	C-418-	C-501-4	Balch Blvd	ARVE=Air Release Valve Enclosure (Example xxx-A-PW)
207.	696 C - PW	2	ARVE	C-418-	C-501-4	Balch Blvd	ARVE=Air Release Valve Enclosure (Example xxx-A-PW)
208.	696 D - PW	2	ARVE	C-418-	C-501-4	Balch Blvd	ARVE=Air Release Valve Enclosure (Example xxx-A-PW)
209.	697 - PW	8	GV	C-418-	C-514-30	Balch Blvd	GV = Gate Valve
210.	698 - PW	6	GV	C-418-	C-510-19	Balch Blvd	GV = Gate Valve
211.	699 - PW	8	GV	C-418-	C-513-29	Balch Blvd	GV = Gate Valve
212.	700 - PW	8	GV	C-418-	C-506-9	Balch Blvd	GV = Gate Valve
213.	701 - PW	16	GV	C-418-	C-518-5	Balch Blvd	GV = Gate Valve
214.	702 - PW	14	GV	C-418-	C-518-5	Balch Blvd	GV = Gate Valve
215.	703 - PW	14	GV	C-418-	C-518-5	Balch Blvd	GV = Gate Valve
216.	704 - PW	2	ARV	C-419-	C-501-4	Balch Blvd	2" Gate Valve - In Valve Box receives Main V# listed in INDEX (Example xxx-PW)
217.	704 A - PW	2	ARVE	C-419-	C-501-4	Balch Blvd	ARVE=Air Release Valve Enclosure (Example xxx-A-PW)
218.	704 B - PW	1	ARVE	C-419-	C-501-4	Balch Blvd	ARVE=Air Release Valve Enclosure (Example xxx-A-PW)
219.	704 C - PW	2	ARVE	C-419-	C-501-4	Balch Blvd	ARVE=Air Release Valve Enclosure (Example xxx-A-PW)
220.	704 D - PW	2	ARVE	C-419-	C-501-4	Balch Blvd	ARVE=Air Release Valve Enclosure (Example xxx-A-PW)
221.	705 - PW	8	GV	C-419-	C-514-30	Balch Blvd	GV = Gate Valve
222.	706 - PW	8	GV	C-419-	C-514-30	Balch Blvd	GV = Gate Valve
223.	707 - PW	8	GV	C-419-	C-514-30	Balch Blvd	GV = Gate Valve
224.	708 - PW	8	GV	C-419-	C-506-10	Balch Blvd	GV = Gate Valve
225.	709 - PW	6	GV	C-419-	C-510-20	Balch Blvd	GV = Gate Valve
226.	710 - PW	16	GV	C-420-	C-517-4	Balch Blvd	GV = Gate Valve
227.	711 - PW	16	GV	C-420-	C-517-4	Balch Blvd	GV = Gate Valve
228.	712 - PW	16	GV	C-420-	C-517-4	Balch Blvd	GV = Gate Valve
229.	713 - PW	2	ARV	C-420-	C-501-4	Balch Blvd	2" Gate Valve - In Valve Box receives Main V# listed in INDEX (Example xxx-PW)
230.	713 A - PW	2	ARVE	C-420-	C-501-4	Balch Blvd	ARVE=Air Release Valve Enclosure (Example xxx-A-PW)
231.	713 B - PW	1	ARVE	C-420-	C-501-4	Balch Blvd	ARVE=Air Release Valve Enclosure (Example xxx-A-PW)
232.	713 C - PW	2	ARVE	C-420-	C-501-4	Balch Blvd	ARVE=Air Release Valve Enclosure (Example xxx-A-PW)
233.	713 D - PW	2	ARVE	C-420-	C-501-4	Balch Blvd	ARVE=Air Release Valve Enclosure (Example xxx-A-PW)
234.	714 - PW	16	GV	C-420-	C-511-22	Balch Blvd	GV = Gate Valve
235.	715 - PW	16	GV	C-420-	C-511-22	Balch Blvd	GV = Gate Valve

Valve Index#	Valve Number	Valve Size INCHES	Valve Type	Drawing	Plan Detail	Street	Notes
236.	716 - PW	16	GV	C-420-	C-517-4	Balch Blvd	GV = Gate Valve
237.	717 - PW	16	GV	C-420-	C-504-6	Balch Blvd	GV = Gate Valve
238.	718 - PW	8	GV	C-420-	C-504-6	Balch Blvd	GV = Gate Valve
239.	719 - PW	8	GV	C-421-	C-505-7	Balch Blvd	GV = Gate Valve
240.	720 - PW	14	GV	C-421-	C-505-7	Propellant Blvd	GV = Gate Valve
241.	721 - PW	16	GV	C-421-	C-505-7	Propellant Blvd	GV = Gate Valve
242.	722 - PW	2	ARV	C-421-	C-501-4	Propellant Blvd	2" Gate Valve - In Valve Box receives Main V# listed in INDEX (Example xxx-PW)
243.	722 A - PW	2	ARVE	C-421-	C-501-4	Propellant Blvd	ARVE=Air Release Valve Enclosure (Example xxx-A-PW)
244.	722 B - PW	1	ARVE	C-421-	C-501-4	Propellant Blvd	ARVE=Air Release Valve Enclosure (Example xxx-A-PW)
245.	722 C - PW	2	ARVE	C-421-	C-501-4	Propellant Blvd	ARVE=Air Release Valve Enclosure (Example xxx-A-PW)
246.	722 D - PW	2	ARVE	C-421-	C-501-4	Propellant Blvd	ARVE=Air Release Valve Enclosure (Example xxx-A-PW)
247.	723 - PW	2	ARV	C-422-	C-501-4	Propellant Blvd	2" Gate Valve - In Valve Box receives Main V# listed in INDEX (Example xxx-PW)
248.	723 A - PW	2	ARVE	C-422-	C-501-4	Propellant Blvd	ARVE=Air Release Valve Enclosure (Example xxx-A-PW)
249.	723 B - PW	1	ARVE	C-422-	C-501-4	Propellant Blvd	ARVE=Air Release Valve Enclosure (Example xxx-A-PW)
250.	723 C - PW	2	ARVE	C-422-	C-501-4	Propellant Blvd	ARVE=Air Release Valve Enclosure (Example xxx-A-PW)
251.	723 D - PW	2	ARVE	C-422-	C-501-4	Propellant Blvd	ARVE=Air Release Valve Enclosure (Example xxx-A-PW)
252.	724 - PW	8	GV	C-422-	C-503-2	Propellant Blvd	GV = Gate Valve
253.	725 - PW	6	GV	C-422-	C-503-2	Propellant Blvd	GV = Gate Valve
254.	726 - PW	8	GV	C-422-	C-503-2	Propellant Blvd	GV = Gate Valve
255.	727 - PW	6	GV	C-422-	C-503-2	Propellant Blvd	GV = Gate Valve
256.	728 - PW	3	GV	C-422-	C-503-1	Propellant Blvd	GV = Gate Valve
257.	729 - PW	3	GV	C-422-	C-422-B	Propellant Blvd	GV = Gate Valve
258.	730 - PW	14	GV	C-423-	C-517-3	Propellant Blvd	GV = Gate Valve
259.	731 - PW	16	GV	C-423-	C-517-3	Propellant Blvd	GV = Gate Valve
260.	732 - PW	16	GV	C-423-	C-517-3	Propellant Blvd	GV = Gate Valve
261.	733 - PW	2	ARV	C-424-	C-501-4	NDBC	2" Gate Valve - In Valve Box receives Main V# listed in INDEX (Example xxx-PW)
262.	733 A - PW	2	ARVE	C-424-	C-501-4	NDBC	ARVE=Air Release Valve Enclosure (Example xxx-A-PW)
263.	733 B - PW	1	ARVE	C-424-	C-501-4	NDBC	ARVE=Air Release Valve Enclosure (Example xxx-A-PW)
264.	733 C - PW	2	ARVE	C-424-	C-501-4	NDBC	ARVE=Air Release Valve Enclosure (Example xxx-A-PW)

Valve Index #	Valve Number	Valve Size INCHES	Valve Type	Drawing	Plan Detail	Street	Notes
265.	733 D - PW	2	ARVE	C-424-	C-501-4	NDBC	ARVE=Air Release Valve Enclosure (Example xxx-A-PW)
266.	734 - PW	8	GV	C-424-	C-514-32	NDBC	GV = Gate Valve
267.	735 - PW	12	GV	C-424-	C-514-32	NDBC	GV = Gate Valve
268.	736 - PW	2	ARV	C-425-	C-501-4	NDBC	2" Gate Valve - In Valve Box receives Main V# listed in INDEX (Example xxx-PW)
269.	736 A - PW	2	ARVE	C-425-	C-501-4	NDBC	ARVE=Air Release Valve Enclosure (Example xxx-A-PW)
270.	736 B - PW	1	ARVE	C-425-	C-501-4	NDBC	ARVE=Air Release Valve Enclosure (Example xxx-A-PW)
271.	736 C - PW	2	ARVE	C-425-	C-501-4	NDBC	ARVE=Air Release Valve Enclosure (Example xxx-A-PW)
272.	736 D - PW	2	ARVE	C-425-	C-501-4	NDBC	ARVE=Air Release Valve Enclosure (Example xxx-A-PW)
273.	737 - PW	8	GV	C-425-	C-514-31	NDBC	GV = Gate Valve
274.	736 - PW	2	ARV	C-426-	C-501-4	NDBC	2" Gate Valve - In Valve Box receives Main V# listed in INDEX (Example xxx-PW)
275.	736 A - PW	2	ARVE	C-426-	C-501-4	NDBC	ARVE=Air Release Valve Enclosure (Example xxx-A-PW)
276.	736 B - PW	1	ARVE	C-426-	C-501-4	NDBC	ARVE=Air Release Valve Enclosure (Example xxx-A-PW)
277.	736 C - PW	2	ARVE	C-426-	C-501-4	NDBC	ARVE=Air Release Valve Enclosure (Example xxx-A-PW)
278.	736 D - PW	2	ARVE	C-426-	C-501-4	NDBC	ARVE=Air Release Valve Enclosure (Example xxx-A-PW)
279.	737 - PW	14	GV	C-426-	C-505-36	NDBC	GV = Gate Valve
280.	738 - PW	14	GV	C-426-		NDBC	GV = Gate Valve
281.	739 - PW	14	GV	C-427-		"H" ROAD	GV = Gate Valve
282.	740 - PW	14	GV	C-427-		"H" ROAD	GV = Gate Valve
283.	741 - PW	2	ARV	C-427-	C-501-4	"H" ROAD	2" Gate Valve - In Valve Box receives Main V# listed in INDEX (Example xxx-PW)
284.	741 A - PW	2	ARVE	C-427-	C-501-4	"H" ROAD	ARVE=Air Release Valve Enclosure (Example xxx-A-PW)
285.	741 B - PW	1	ARVE	C-427-	C-501-4	"H" ROAD	ARVE=Air Release Valve Enclosure (Example xxx-A-PW)
286.	741 C - PW	2	ARVE	C-427-	C-501-4	"H" ROAD	ARVE=Air Release Valve Enclosure (Example xxx-A-PW)
287.	741 D - PW	2	ARVE	C-427-	C-501-4	"H" ROAD	ARVE=Air Release Valve Enclosure (Example xxx-A-PW)
288.	742 - PW	2	ARV	C-428-	C-501-4	"H" ROAD	2" Gate Valve - In Valve Box receives Main V# listed in INDEX (Example xxx-PW)
289.	742 A - PW	2	ARVE	C-428-	C-501-4	"H" ROAD	ARVE=Air Release Valve Enclosure (Example xxx-A-PW)

Valve Index #	Valve Number	Valve Size INCHES	Valve Type	Drawing	Plan Detail	Street	Notes	
290.	742 B - PW	1	ARVE	C-428-	C-501-4	"H" ROAD ARVE=Air Release Valve Enclosure (Example xxx-A-PW)		
291.	742 C - PW	2	ARVE	C-428-	C-501-4	"H" ROAD	ARVE=Air Release Valve Enclosure (Example xxx-A-PW)	
292.	742 D - PW	2	ARVE	C-428-	C-501-4	"H" ROAD	ARVE=Air Release Valve Enclosure (Example xxx-A-PW)	
293.	743 - PW	2	ARV	C-429-	C-501-4	Trent Lott Parkway	2" Gate Valve - In Valve Box receives Main V# listed in INDEX (Example xxx-PW)	
294.	743 A - PW	2	ARVE	C-429-	C-501-4	Trent Lott Parkway	ARVE=Air Release Valve Enclosure (Example xxx-A-PW)	
295.	743 B - PW	1	ARVE	C-429-	C-501-4	Trent Lott Parkway	ARVE=Air Release Valve Enclosure (Example xxx-A-PW)	
296.	743 C - PW	2	ARVE	C-429-	C-501-4	Trent Lott Parkway	ARVE=Air Release Valve Enclosure (Example xxx-A-PW)	
297.	743 D - PW	2	ARVE	C-429-	C-501-4	Trent Lott Parkway	ARVE=Air Release Valve Enclosure (Example xxx-A-PW)	
298.	744 - PW	14	GV	C-429-		Trent Lott Parkway	GV = Gate Valve	
299.	743 - PW	2	ARV	C-430-	C-501-4	Trent Lott Parkway	2" Gate Valve - In Valve Box receives Main V# listed in INDEX (Example xxx-PW)	
300.	743 A - PW	2	ARVE	C-430-	C-501-4	Trent Lott Parkway	ARVE=Air Release Valve Enclosure (Example xxx-A-PW)	
301.	743 B - PW	1	ARVE	C-430-	C-501-4	Trent Lott Parkway	ARVE=Air Release Valve Enclosure (Example xxx-A-PW)	
302.	743 C - PW	2	ARVE	C-430-	C-501-4	Trent Lott Parkway	ARVE=Air Release Valve Enclosure (Example xxx-A-PW)	
303.	743 D - PW	2	ARVE	C-430-	C-501-4	Trent Lott Parkway	ARVE=Air Release Valve Enclosure (Example xxx-A-PW)	
304.	744 - PW	14	GV	C-431-	M 447 MENTERS (1887) 1887 MANUAL PROPERTY (1887) 1887 MANUAL PROPERTY (1887) 1887 MANUAL PROPERTY (1887) 1887	ENDEAVOUR BLVD	GV = Gate Valve	
305.	745 - PW	14	GV	C-431-	C-506-11	ENDEAVOUR BLVD	GV = Gate Valve	

National Aeronautics and Space Administration John C. Stennis Space Center Stennis Space Center, MS 39529-6000

FIELD CHANGE REQUEST (FCR)

(IMPLEMENTED BY SSTD 8070-0001-CONFIG)

FCR No NNS12AA95T-011 Contractor SAUER, INC. Contract No. NNS12AA95T Initiator/Company Jacobs FOSC **EMI No.** 11B315-01 Spec./Section 12G00-G020/ **Drawing No.** C-501, C-515 - 518 **Date** 6/4/2013 Description of problem and recommended change: Problem: Sample Tap Assembly Detail (Detail 3/C-501) indicates to install a riser up to grade; a shut-off valve above the sample tap valve and a valve box above the assembly. Since this Sample Tap will be used only once during construction to verify water quality, the riser, top sample valve and valve box are not necessary after construction is completed. Solution: Delete the Valve Box. After water samples have been taken and have passed water quality requirements, remove the riser and top valve. Install a plug in the lower sample tap valve to seal and prevent any future contamination of the water main. A new AHA is not Required for this work. No Yes Cost Impact Not to Exceed l No Schedule Impact Yes No. of Days **Project Manager** Date **DISPOSITION (NASA) Evaluation:** Construction Engineer Date **Quality Engineer** Safety Engineer Date CCB Approved for Implementation Yes □ No COTR Date Contracting Officer Date

FIELD CHANGE REQUEST (FCR) INSTRUCTIONS

PURPOSE:

The Field Change Request (FCR) is used to document, track, and implement changes. The FCR may be initiated by anyone associated with the project.

An FCR is initiated to document the following:

- a. Discrepancies that may exist between the drawings/specifications and field conditions.
- b. Inconsistencies in the drawings and/or specifications.
- c. Recommended design or specification changes that do not affect form, fit, or function (variance).
- d. Changes that are necessary to correct deficiencies in the design or specification.

An FCR may also be initiated by the PMD Office to request that the Contractor evaluate, for cost and schedule impact, proposed changes to the drawings/specifications.

INSTRUCTIONS:

INITIATOR -

- 1. Provide all information requested at the top of the FCR form.
- 2. Describe the recommended change; provide rationale and justification in detail.
- 3. List all documentation affected, including revision.
- 4. Provide all redlined documentation with the FCR within 2 working days.
- 5. FCR number will be given by Configuration Control.

- **CONTRACTOR** 1. Cost/schedule impacts must be determined and noted in the space provided. Attach additional details, if necessary.
 - 2. All FCRs must be signed by the Project Manager.
 - 3. Submit the FCR to NASA for evaluation and disposition. NOTE: Change may NOT be implemented until written approval is received from the Contracting Officer.

NASA -

- 1. The designated PMD engineer evaluates the change and determines the appropriate disposition.
- 2. Submit the FCR to the CCB/TRG for review and concurrence.
- 3. All changes that impact cost or schedule must be submitted to the Contracting Officer for approval.
- 4. Submit changes that affect configuration to the Configuration Control Board (CCB) within 5 working days.
- 5. Provide a copy of the completed FCR to the Contractor.
- 6. Provide the original FCR to Configuration Control.

National Aeronautics and Space Administration

John C. Stennis Space Center Stennis Space Center, MS 39529-6000



June 5, 2013

Reply to Attn of: **RA10/13-0870DAW**

Sauer Incorporated
Attn: (b)(6)
11223 Phillips Pkwy, Drive East
Jacksonville, FL 32256-1574

Subject: EMI: 11B315-01 Upgrades to Potable Water System. NASA Task Order: NNS12AA95T

The following listed Field Change Request (FCR) is being sent to you for cost and schedule impact:

FCR NNS12AA95T-011:

Problem: Sample Tap Assembly Detail (Detail 3/C-501) indicates to install a riser up to grade; a shut-off valve above the sample tap valve and a valve box above the assembly. Since this Sample Tap will be used only once during construction to verify water quality, the riser, top sample valve and valve box are not necessary after construction is completed.

Solution: Delete the Valve Box. After water samples have been taken and have passed water quality requirements, remove the riser and top valve. Install a plug in the lower sample tap valve to seal and prevent any future contamination of the water main.

AHA is not required for this work.

NOTE: ** "ANY COMMENT(S) THAT RESULT IN A CHANGE TO THE CONTRACT COST, SCOPE, OR SCHEDULE YOU MUST NOTIFY THE CONTRACTING OFFICER FOR APPROVAL PRIOR TO IMPLEMENTATION OR ANY COSTS ARE INCURRED."

This request for pricing does not commit the Government to pay any cost incurred in submitting the price or in making necessary studies or designs for its preparation, nor to contract for service or supplies.

PROPOSALS MUST SET FORTH FULL, ACCURATE, AND COMPLETE INFORMATION AS REQUIRED BY THIS FCR. THE PENALTY FOR MAKING FALSE STATEMENTS IN PROPOSALS IS PRESCRIBED IN 18 U.S.C. 1001.

In order to expedite these changes, please return a signed copy with cost breakdown to Jason Edge, in the Office of Procurement, DA00, no later than close of business, June 12, 2013.

If you have any questions, give Mr. Dale A. Woolridge a call at ext. 228-688-1655.

Jason F. Edge

Contracting Officer

cc:

Jacobs-FOSC

ficial file

National Aeronautics and Space Administration John C. Stennis Space Center Stennis Space Center, MS 39529-6000

FIELD CHANGE REQUEST (FCR)

(IMPLEMENTED BY SSTD 8070-0001-CONFIG)

FCR No NNS12AA95T-011 Contractor SAUER, INC. Contract No. NNS12AA95T Initiator/Company Jacobs FOSC **EMI No.** 11B315-01 Spec./Section 12G00-G020/ **Drawing No.** C-501,C-515 - 518 **Date** 6/4/2013 Description of problem and recommended change: Problem: Sample Tap Assembly Detail (Detail 3/C-501) indicates to install a riser up to grade; a shut-off valve above the sample tap valve and a valve box above the assembly. Since this Sample Tap will be used only once during construction to verify water quality, the riser, top sample valve and valve box are not necessary after construction is completed. Solution: Delete the Valve Box. After water samples have been taken and have passed water quality requirements, remove the riser and top valve. Install a plug in the lower sample tap valve to seal and prevent any future contamination of the water main. A new AHA is not Required for this work. Cost Impact No Yes Not to Exceed _____ Schedule Impact No Yes No. of Days Project Manager Date **DISPOSITION (NASA)** Evaluation: Construction Engineer Date ____ Quality Engineer Safety Engineer Date CCB Approved for Implementation Yes No COTR Contracting Officer Date



11223 phillips parkway drive, east jacksonville, florida 32256

P: 904.262.6444 F: 904.268.6156

www.sauer-inc.com

June 14th, 2013

National Aeronautics and Space Administration John C. Stennis Space Center Stennis Space Center, MS 39529-6000

Attn: Jason Edge, Contracting Officer

RE: NNS12AA95T, Potable Water System Upgrades, Stennis Space Center, MS; Sauer Job No. 1603

SUBJECT: FCR-011, Deletion of Sample Tap Valve Boxes

Mr. Edge,

We herein submit our formal cost proposal covering the cost to furnish, and install all work as detailed in FCR-011. The work includes the installation of Sample tap assemblies as required by contract with the exception of the valve boxes. After sampling is completed, we will remove the riser top valve and install a plug in the lower valve to seal and prevent future contamination.

We received an official FCR for this work on June 5th, 2013. Our cost proposal contains breakdowns from Sauer and our subcontractor SH Anthony.

We are currently requesting an additional fourteen (14) calendar day time to complete this work.

If you have any questions or wish to discuss further do not hesitate to call us directly.

Sincerely.

(b)(6)

SAUER INCORPORATED

SORT ON BORAL OF (b)(6)

Project Manager

	CONTRACT TITLE: NNS12AA95T, Potable Water System Upgrades, Stennis Space Center, MS; Sauer Job N										
DESCRIPTION: FCR-011,	Deletion of Sam	nple Tap Valv	ve Boxes								
PRIME	CONTRACTOR'S	S WORK			Revisions/Comments						
Direct Materials		o vvortit			1 CVISIONS/COMMITTENES						
2. Sales Tax on Materials	% of line 1										
3. Direct Labor	0/ 511 5										
4. Restocking fee	% of line 3										
5. Rental Equipment	0/ -5 !: 5										
6. Sales Tax on Rental Equipment	% of line 5										
7. Equipment Ownership and Operating Ex 8. SUBTOTAL (add lines 1 - 7)	penses										
9. Freight to ship	% of line 8										
10. SUBTOTAL (Add lines 8 & 9)											
Prime Remarks:											
SUBC	ONTRACTOR'S	WORK									
11. Direct Materials			0								
12. Sales Tax on Materials	% of line 11	0.00%	0								
13. Direct Labor			0								
14. Insurance, Taxes, and Fringe Benefits	% of line 13	0.00%	0								
15. Rental Equipment			0								
16. Sales Tax on Rental Equipment	% of line 15	0.00%	0								
17. Equipment Ownership and Operating E	xpenses		0								
18. SUBTOTAL (add lines 11 - 17)	0, 1, 10	0.000/									
19. Field Overhead 20. SUBTOTAL (Add lines 18 & 19)	% of line 18	0.00%	0	0							
21. Home Office Overhead	% of line 20	0.00%	0								
22. Profit	% of line 20	10.00%	0								
23. SUBTOTAL (Add Lines 20-22)		10.0070		35.386	SHA Total						
Sub's Remarks: SH Anthony	\$35,386.00										
	SUMMARY										
24. Prime Contractor's Work (from Line 10))										
25. Sub-Contractor's Work (from line 23)											
26. SUBTOTAL (add lines 24 & 25) 27. Prime Overhead	% of Line 25				***************************************						
27. Prime Overnead 28. Prime Profit	% of Line 25										
29. Gross Receipts Tax	% of Line 26										
30. SUBTOTAL (add lines 26 -29)	,5 51 En 10 E				***************************************						
31. Prime Contractor's Bond Premium	% of Line 30										
32. TOTAL COST (Add Lines 30 & 31)											
Estimated time extension and justific	ation										
Please see attached cover letter.											
Prime Contractor: Sauer Incorporate Subcontractor:	ed, d/b/a Sauer S	outheast									
(b)(6)		Project Engin			Date 6-14-13						

National Aeronautics and Space Administration John C. Stennis Space Center Stennis Space Center, MS 39529-6000

FIELD CHANGE REQUEST (FCR)

(IMPLEMENTED BY SSTD 8070-0001-CONFIG)

FCR No NNS12AA95T-011 Contractor SAUER, INC. Contract No. NNS12AA95T Initiator/Company Jacobs FOSC EMI No. 11B315-01 Spec./Section 12G00-G020/ **Drawing No.** C-501, C-515 - 518 Date 6/4/2013 Description of problem and recommended change: Problem: Sample Tap Assembly Detail (Detail 3/C-501) indicates to install a riser up to grade; a shut-off valve above the sample tap valve and a valve box above the assembly. Since this Sample Tap will be used only once during construction to verify water quality, the riser, top sample valve and valve box are not necessary after construction is completed. Solution: Delete the Valve Box. After water samples have been taken and have passed water quality requirements, remove the riser and top valve. Install a plug in the lower sample tap valve to seal and prevent any future contamination of the water main. A new AHA is not Required for this work. No Cost Impact Yes Not to Exceed Schedule Impact No. of Days 79 sard on bahalf Date 6/14/13 **Project Manager** TION (NASA) O Evaluation: Construction Engineer **Quality Engineer** Safety Engineer CCB Approved for Implementation Yes COTR Contracting Officer



Change Order Request # FCR-011 / SHA CO# 001

CHANGE ORDER REQUEST NAME: Deletion of Sample Tap Valve Boxes

Job # 1037

Total						5	35,386.33
Fee(15%)						\$	4,615.61
Mr						\$	30,770.72
Misc Labor Burden 37%						\$	5.959.22
Tax and Bond (5.97%)			**			-	
Materiai Tax (9%)			\$.			8	*
Base Total	\$ 15,106.00	\$ 857.35	\$.	\$ 7,848.15	\$ -	5	24,811.50
						3	***
			100 E.S.			\$	*
FCR-011	\$ 15,106.00	\$ 857.35	\$	\$ 7.848.15	Qualifornia de la companya del companya del companya de la company	s	24,811.50
SCOPE OF WORK	SHA LABOR	MATERIAL	SUBGONTRACT	EQUIPMENT	OTHER		TOTAL

DESCRIPTION: Install Sample Taps assemblies as required by contract with the exception of the valve boxes. After sampling is completed remove the riser top valve and install a plug in the lower valve to seal and prevent future contamination.

ADDITIONAL TIME REQUESTED:

14 Days

SIGNED 8	(b)(6)	DATE	13 June 13	
Project Mai				



* All Rates Match Original Cost Breakdown Sheet

Labor	Qty of Men	Hrs	Straight Time Rate	Straight Time	OT Hrs	Overtime Rate	Over Time	TOTAL
Sr. Project Manager	1	1	76.60	76.6		95.75	\$	\$ 76,60
Project Manager	1	15	73.80	1107		92.25	5	\$ 1,107.00
Sr Superintendent	- 1		56,30	* 0		82.88	5	5 -
Superintendent	100	35	62.92	2202.2		88.09	\$	\$ 2,202,20
Safety Manager	1	35	73.80	2583		92.25	\$.	\$ 2,583.00
Quality Control	1	35	62.92	2202.2		86.09	\$.	\$ 2,202.20
Operator - Equipment	1	115	15.00	1725		22.50	5 .	\$ 1,725.00
Propelayer			14.00	0		21.00	\$ -	5 -
Skilled Laborer	2	230	13.50	6210		20.25	\$.	\$ 6,210.00
Skilled Laborer			31.08	0		46.62	\$ -	S -
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16,106,00

Materials	Units	Qty	Unit Price	Tota
		-	-	-
New Couplings and Caps	LS.	1	575.00	575.00
New Couplings and Caps Freight	LS	1	52.35	52.35
Sand Backfill	CY	46	5.00	230 00

857.35

Subcontractors	Units	Qty	Price	Total
				0
				- (

Equipment	Units	Qty	Price	Total
Kubota 121 Excavator (MINI)	HRS	57.5	60	3450
Case 160	HRS		125	0
Case 450 skid steer	HRS		75	0
Cat 930G Loader	HRS		95	0
Kobelco 210	HRS		150	0
Compactor	HRS	57.5	12	690
Trenching Equipment				0
Grade/Laser Equipment				0
Dewstering Equipment				0
Misc Equipment (saws/generators/p	ressure w	asher)		0
Boring Equipment				0
Response and Testing Equipment				0
Confined Space Equipminet	*			0
Vacuum Truck & Jetting Equipment	WK	2.5	1483.26	3708 15
Video Inspection Equipment				0



For Quote Purposes Only

Volve Construction Equipment Rents

RENTAL QUOTE

\$

8

Sales Tax

Total

28.42 \$

494.42 \$

85.26 \$

1,483.26 \$

255.78

4,449,78

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	/olvo Rents, Inc.									
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From:

Edge, Jason F. (SSC-DA00) To: Cc: Woolridge, Dale A. (SSC-RA10) SSC-JACOBS)[JACOBS TECHNOLOGY INC (SSC FOSC)];

FW: NASA Potable Water Upgrade FCR 011 Cost Proposal Subject:

Date: Friday, June 14, 2013 4:56:48 PM Attachments: 1603 FCR 11 Proposal0001.pdf

Jason,

Find attached our cost proposal for the above referenced request. Please contact us if you require additional information or if we can assist further.

Thank you

SENIOR PROJECT MANAGER

Sauer Incorporated

www.sauer-inc.com

From:

Sent: Friday, June 14, 2013 4:05 PM

To:

Cc:

Subject: NASA Potable Water Upgrade FCR 011 Cost Proposal

Attached is the cost proposal for 1603. Please review and submit. Not sure if it goes to Dale or Jason.

Thank you,

PROJECT ENGINEER

Sauer Incorporated

www.sauer-inc.com

From

Sent: Friday, June 14, 2013 3:58 PM

To:

Subject:

From: Edge, Jason F. (SSC-DA00)

(SSC-JACOBS)[JACOBS TECHNOLOGY INC (SSC FOSC)] To: Woolridge, Dale A. (SSC-RA10);

Subject: FW: Potable Water Systems Upgrade, Stennis Space Center, MS, Revised Cost Proposal FCR-11

Date: Wednesday, June 26, 2013 3:04:02 PM

Attachments: 20130626155031602.pdf

From:

Sent: Wednesday, June 26, 2013 3:00 PM To: Edge, Jason F. (SSC-DA00)

Subject: RE: Potable Water Systems Upgrade, Stennis Space Center, MS, Revised Cost Proposal FCR-

11

Jason,

Please find attached the revised cost proposal for FCR- 11. Please let us know if you have any questions.

Thank you,

PROJECT ENGINEER

Sauer Incorporated

www.sauer-inc.com



11223 phillips parkway drive, east jacksonville, florida 32256

P: 904.262.6444 F: 904.268.6156

www.sauer-inc.com

June 26th, 2013

National Aeronautics and Space Administration John C. Stennis Space Center Stennis Space Center, MS 39529-6000

Attn: Jason Edge, Contracting Officer

RE: NNS12AA95T, Potable Water System Upgrades, Stennis Space Center, MS; Sauer Job No. 1603

SUBJECT: FCR-011, Deletion of Sample Tap Valve Boxes Revised Proposal

Mr. Edge,

We herein submit our formal cost proposal covering the cost to furnish, and install all work as detailed in FCR-011. The work includes the installation of Sample tap assemblies as required by contract with the exception of the valve boxes. After sampling is completed, we will remove the riser top valve and install a plug in the lower valve to seal and prevent future contamination. Revised pricing is the result of leaving the sample tap location open until the time that we need to install the coupling and cap.

We received an official FCR for this work on June 5th, 2013, and the scope was further revised based on meetings with SHA, Sauer, and NASA. Our cost proposal contains breakdowns from Sauer and our subcontractor SH Anthony.

We are currently requesting an additional fourteen (14) calendar day time to complete this work.

If you have any questions or wish to discuss further do not hesitate to call us directly.

Sincerely.

(b)(6

Project ivianager

PROPOSAL/ESTIMATE FOR CON	TRACT MODIF	ICATION			6/26/2013
CONTRACT TITLE: NNS12A	A95T, Potable Wa	ater System Upgr	ades, Stennis S	pace Center, l	MS; Sauer Job No. 1603
DECODIDATION FOR 014 D	alation of Con	anle Ten Vels	o Boyos - Bo	viced 6/26	:/12
DESCRIPTION: FCR-011, D	eletion of San	npie rap vaiv	e boxes- ke	viseu o/ 20	5/13
PRIME C	ONTRACTOR'	S WORK	A CONTRACTOR OF THE PROPERTY O		Revisions/Comments
1. Direct Materials					
2. Sales Tax on Materials	% of line 1				- AND
3. Direct Labor					
4. Restocking fee	% of line 3				ALLEGO WAR TO THE TOTAL CONTROL OF THE TOTAL CONTRO
5. Rental Equipment	06 611 #				
• •	% of line 5				
7. Equipment Ownership and Operating Ex8. SUBTOTAL (add lines 1 - 7)	penses				
9. Freight to ship	% of line 8				
10. SUBTOTAL (Add lines 8 & 9)					
Prime Remarks:					
SUBCO	NTRACTOR'S	WORK			
11. Direct Materials			0		
12. Sales Tax on Materials	% of line 11	0.00%	0		
13. Direct Labor		2 2 2 2 2	0		
14. Insurance, Taxes, and Fringe Benefits	% of line 13	0.00%	0		
15. Rental Equipment	04 - 5 11 4 5	0.000/	0		1.100000
16. Sales Tax on Rental Equipment	% of line 15	0.00%	0		
 Equipment Ownership and Operating E SUBTOTAL (add lines 11 - 17) 	xpenses		0		AMERICA I
19. Field Overhead	% of line 18	0.00%	0		
20. SUBTOTAL (Add lines 18 & 19)		0.0070		0	
21. Home Office Overhead	% of line 20	0.00%	0		
22. Profit	% of line 20	10.00%	0		
23. SUBTOTAL (Add Lines 20-22)	—			15,838 S	SHA Total
Sub's Remarks: SH Anthony	\$15,838.00				
	SUMMARY				
24. Prime Contractor's Work (from Line 10))				
25. Sub-Contractor's Work (from line 23)					
26. SUBTOTAL (add lines 24 & 25)					
27. Prime Overhead	% of Line 25				
28. Prime Profit	% of Line 24				
29. Gross Receipts Tax	% of Line 26				
30. SUBTOTAL (add lines 26 -29)	0/ 0/1: 20				
31. Prime Contractor's Bond Premium	% of Line 30				
32. TOTAL COST (Add Lines 30 & 31) Estimated time extension and justific	cation				
Please see attached cover letter.	-				
Prime Contractor: Sauer Incorporat	ed, d/b/a Sauei	r Southeast			
Subcontractor:	,				
			•		
				r	Date 6-26-13
(b)(6)	(b)(c)	Project Engi	neer	L	
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Change Order Request # FCR-011 / SHA CO# 001

CHANGE ORDER REQUEST NAME: Deletion of Sample Tap Valve Boxes

.ioh # 1037

SCOPE OF WORK	£'6	LABOR	1.17	YERIAL	EUBCO	TRACT	EQ	UIPMENT	Q	THER		TOTAL
FCR-011	S	8,512.40	İ	627.35			5	1,453.26		Saluta	\$	10.623.01
	- T		Ì	A STATE OF THE STA			l				\$	i.
										~~~	\$	
Basa Total	Š	8,512.40	5	627.35	Ş	e	\$	1,483.26	Š	œ	\$	10,623 01
Material Tox (9%)	c,	274			5	+					\$	•
Tax and Bond (5 97%)											5	3,149.59
Miso Labor Burden 37%								1			\$	13,772.60
Fes(15%)											\$ :	2,065 89
Total						- up					\$	15,838.49

ADDITIONAL TIME REQUESTED.

14 Days

SIGNED BY:  (h) (6)  Project Manag	(b)(6)	DATE 2	4
(b)(b)			



#### * All Rates Match Original Cost Breakdown Sheet

1	Qty of		Straight Time	Straight		Overtime		
Labor	Men	Кrs		Time	OT Hrs	Rate	Over Time	TOTAL
Sr. Project Manager	3	1	76.60	76.6		95.75	\$ -	\$ 76.60
Project Manager	1	10	73.80	738		92.25	\$ .	\$ 738.00
8r. Superintendent	1		66.30	0		62.65	\$	3
Superintendent	1	20	62.92	1258.4		88.09	5	5 1,258 40
Safely Manager	1	20	73.80	1470		92.26	\$ -	\$ 1,476.00
Quality Control	1	20	62.92	1258.4		69.09	\$	\$ 1,258.40
Operator - Equipment	1	40	15.00	660		22.50	\$ -	\$ 600.00
Pipelayer		A STATE OF THE STA	14,50	Ü		21.00	\$ -	\$ -
Sxilled Laborer	2	115	13.50	3105		20.25	\$ ' .	\$ 3,105.00
Skilled Laborer			31.08	0		46.62	\$ .	, where
		************					\$	\$ -
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							<b>.</b> 5	
-							\$	5 -
						***************************************	5 -	\$ -

8,512.40

Materials	Units	Qty	Unit Price	Total
and the factor of the factor o			¥11	10.000
		***************************************		- 111111
New Couplings and Caps	LS	1	575.00	576.00
New Cooplings and Caps Freight	LG	1	52.35	52.35
				-, 1, 45, 3, 43
1		- 1		grey experience

627.35

Subcontractors	Units	Qty	Price	Total
The second secon	-			0
				Ó
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Units	Qty	Price	Total
HRS	1	60	Ç
HRS		125	Ō
THRS		75	0
HR\$		95	0
HRS		160	Û
IIRS		12	0
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	HRS HRS HRS HRS HRS HRS	HRS HRS HRS HRS HRS HRS NRS	HRS 60 HRS 126 HRS 76 HRS 95 HRS 150 HRS 12



BATO 10700) SAUER INC. 30 NETY FIRST ST. PHTSOURGH, PA. 15701 Bepts Bauer Bienns Space Centeil Ms

Quote Number	CC011658
Quote Date	06/13/13
Expliation Date	0 <del>8</del> /20/13
Paga	1 of 1

Customer Job/Project Name  (b)(6)
Comard (b)(6)
Additional Info

W	Ωιγ	UM	froduct	Description	Esch	Extended
1 2 3 4 5	1 1 23 73	EA EA	63016989 63018909 63010026 63010099 63018999	RETURN FREIGHT FOR VALVE BOXES & LIDS REGTOCK FEEE @ 30% FOR RETURN OF VALVE BOX AND LIDS 1" IPS COMP X MIPT ADAPTER PP BODY, 200 PSI, CEPEX 21929' CAP PLUG FREIGHT TO SHIP CAPIPLUG & ADAPTER	772,90 1173,00 18,60 6,50 52,35	772,50 1,173,00 428,50 148,50 62,36

ISCO Standard Terms and Conditions apply. Please visit http://www.isco-pipe.com/terms-and-conditions.aspx

Merchandian Total	Tex 1	Freight 2		Ouota Total	
2,573.25	154.39	National Association and Assoc	0.00	US \$	2,727.64
1 Sales tox will be charged based or myoloo il thare la no tax cottificati	a thu ship to address at the time of son life.	Accepted By:			
2 Frought emount at this quote is an and charges will be determined at	estimate only. Actual freight terms	Printed Name: Date:			



#### Volvo Construction Equipment Rests

## RENTAL QUOTE

VOLVO RENTA	ORDER NUMBER

4,449.78

١	Volvo Renta, Iño.										
Cual F	9 <u>0</u>		Proposal No.	Salesman	)		ATTEN AND ADMINISTRA		Dalé_1	1/12	5/2012
	mer SH Anthon			Ship To		<del>-, ,</del>					
Addrés					E1115557/7			**************************************	774-200-		maining and Cotton of the section of
ΡĮ	ione		Fax	Phone	3 .			Fax			
F.O.0.	Point of Origin -	Ship Via			- Lacons	Volvo	•		C.P.U		
TERM TAX R	· ·		All Rates are based on a f	Hour Day, 40 Hour	Week & 160 H	ocii Măi	nin Gwol <del>o</del>	good !	lot 60 days		
	ING COST:		Freight cost sie per truck!	ned ben				LDW	[X]	Υ	<u> </u>
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Other					LOW	\$	60.00	\$	180.00	\$	540.00
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		E 0	te Purposes Only		Sales Tax	S	28,42	0,1,100	85.26		255,78
*	NA CONTRACTOR OF THE CONTRACTO	rorwe	ira Lathosas Ami		Total	\$	494,42		1,483.20		4,449.78

National Aeronautics and Space Administration John C. Stennis Space Center Stennis Space Center, MS 39529-6000



June 5, 2013

Hereby in Atlanti RA10/13-0870DAW

Sauer Incorporated
Attn: (b)(6)
11223 Phillips Pkwy, Drive East
Jacksonville, FL 32256-1574

Subject: EMI: 11B315-01 Upgrades to Potable Water System, NASA Task Order: NNS12AA95T

The following listed Field Change Request (FCR) is being sent to you for cost and schedule impact:

#### FCR NNS12AA95T-011;

Problem: Sample Tap Assembly Detail (Detail 3/C-501) indicates to install a riser up to grade; a shut-off valve above the sample tap valve and a valve box above the assembly. Since this Sample Tap will be used only once during construction to verify water quality, the riser, top sample valve and valve box are not necessary after construction is completed.

Solution: Delete the Valve Box. After water samples have been taken and have passed water quality requirements, remove the riser and top valve. Install a plug in the lower sample tap valve to seal and prevent any future contamination of the water main.

AHA is not required for this work.

NOTE: ** "ANY COMMENT(S) THAT RESULT IN A CHANGE TO THE CONTRACT COST, SCOPE, OR SCHEDULE YOU MUST NOTIFY THE CONTRACTING OFFICER FOR APPROVAL PRIOR TO IMPLEMENTATION OR ANY COSTS ARE INCURRED."

This request for pricing does not commit the Government to pay any cost incurred in submitting the price or in making necessary studies or designs for its preparation, nor to contract for service or supplies.

PROPOSALS MUST SET FORTH FULL, ACCURATE, AND COMPLETE INFORMATION AS REQUIRED BY THIS FCR. THE PENALTY FOR MAKING FALSE STATEMENTS IN PROPOSALS IS PRESCRIBED IN 18 U.S.C. 1001.

In order to expedite these changes, please return a signed copy with cost breakdown to Jason Edge, in the Office of Procurement, DA00, no later than close of business, June 12, 2013.

If you have any questions, give Mr. Dale A. Woolridge a call at ext. 228-688-1655.

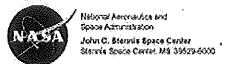
Jason F. Edge

Contracting Officer

c¢;

Jacobs-FOS0

ial file



# FIELD CHANGE REQUEST (FCR) (IMPLEMENTED BY SSTD 8070-0001-CONFIG)

245.111 269C6 CW	RM. MS 39519-8000		FCR No	NNS12AA95T-011
Contractor	SAUER, INC.	Market Ma	Contract No.	NNS12AA95T
Initiator/Company	Jacobs FOSC	*	EMI No.	11B315-01
Spec./Section	12G00-G020/	Committee Commit		C-501,C-515 - 518
	*** WASHINGTON TO THE PARTY OF	TENDER CONTROL AND CONTROL AND		6/4/2013
Description of probl	em and recommen	ded change:		
shut-off valve above Tap will be used onl	e the sample tap val ly once during cons	(Detail 3/C-501) Indica lve and a valve box ab struction to verify wate construction is comple	ove the assem or quality, the ri	bly. Since this Sample
quality requirements	s, remove the riser	vater samples have be and top valve. Install a tion of the water main.	a plug in the lo	ave passed water wer sample tap valve to
A new AHA is not Re	aquired for this wor	·k.		
4		• 	tana ayan <u>ayan</u>	
Cost Impact	□ No □	Yes	Not to Exceed	
Schedule Impact	□ No □	Yes	No. of Days	
Project Manager			Date	
William Co.		DISPOSITION (NASA)		
Evaluation:	,	•	America (1932)	
Construction Engineer	1		Date	
Quality Engineer		š	Date	
Safety Engineer			Date	MACON THE RESIDENCE OF THE PROPERTY OF THE PRO
CGB Approved for Impleme	entation Yes	□ No		
OTR			Date	
Contracting Officer			Date	

## National Aeronautics and Space Administration John C. Stennis Space Center

## FIELD CHANGE REQUEST (FCR)

NNS12AA95T-

Stennis Spa	ace Center, MS 39529-6000	FCR No	015					
Contractor	SAUER, INC.	Contract No.	NNS12AA95T					
Initiator/Compan	S H Anthony		11B315-01					
Spec./Section	12G00-G020/33 11 00	Drawing No.	C-403					
	,	Date	06 September 2013					
	Description of problem and recommended change: Potable Water System Upgrades P: See RFI 015, attached.							
S: See attached Sketch.								
Cost Impact	☐ No ☐ Yes	Not to Exceed						
Schedule Impact	⊠ No ☐ Yes	No. of Days						
Project Manager	(b)(6) CQCM	Date						
	DISPOSITIO	ON (NASA)						
Evaluation:								
NASA Project Manag	NOV.	Data						
Construction Engine								
Quality Engineer								
Safety Engineer								
Environmental								
Design Engineer								
CCB Chair		Data						
CCB Approved for Imp	olementation Yes No							
COTR		Date						
Contracting Office	cer	Date	<del></del>					

Page 89 redacted for the following reason:

(b)(7)(F)

National Aeronautics and Space Administration John C. Stennis Space Center Stennis Space Center, MS 39529-6000



August 1, 2013

Reply to Attn of: RA10/13-1254DAW

Sauer Incorporated
Attn: (h)(6)
11223 Phillips Pkwy, Drive East
Jacksonville, FL 32256-1574

Subject: EMI: 11B315-01 Upgrades to Potable Water System. NASA Contract: NNS12AA95T

The following answer is in response to your Requests for Information:

#### RFI 015 Questions:

Please reference Drawing C-403 at Sta. 135+42

On Drawing C-403 at Sta. 135+42, during subsurface investigation, a 6" water main was located; however this line was not shown on the Contract Drawings.

If this line is active, a new connection will need to be installed.

This will require a FCR for the cost and additional time.

Attached C-403 Drawing with newly located water main shown.

Attached is SHA Drawing P3-03, Subsurface Location Drawing, showing the location of the newly located line?

#### Answer:

The 6" line identified is the Fire Main serving Building 1022. This line is active and requires connection to the new HDPE water line. This line is believed to be C-900.

An additional 2-1/2" line is located to the east of this line. This is the potable water line serving Building 1022. This line is active and requires connection to the new HDPE water line. This line is believed to be PVC.

Both lines shall have isolation valves and valve boxes installed near the connection to the new HDPE line. Current isolation valves for each line exist near the building and at the taps to the existing main water line.

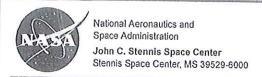
NOTE: ** "Any comment that result in a change to the contract cost, scope, or schedule you must notify the Contracting Officer for approval prior to implementation or any costs are incurred."

If you have any questions, give me a call at 228-688-1655.

Dale A. Woolridge Contracting Officer's Technical Representative

Enclosure

ce: Jacobs-FOSC (b)(6) Official File



### REQUEST FOR INFORMATION

(Implemented by SOI-8040-0001-FACENG)

Request For Information (RFI) Number
015 Water Main Installation and Tie In to Existing System

Date

Requestor

Contract

July 24, 2013

SAUER, INC

NNS12AA95T

Question:

Please reference Drawing C-403 at Sta. 135+42

On Drawing C-403 at Sta. 135+42, during subsurface investigation, a 6" water main was located, however this line was not shown on the Contract Drawings.

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Both lines shall have isolation valves and valve boxes installed near the connection to the new HDPE line. Current isolation valves for each line exist near the building and at the taps to the existing main water line.CSW

- WLE



11223 phillips parkway drive, east jacksonville, florida 32256

P: 904.262.6444 F: 904.268.6156

www.sauer-inc.com

September 16th, 2013

National Aeronautics and Space Administration John C. Stennis Space Center Stennis Space Center, MS 39529-6000

Attn: George Piccolo, Contracting Officer

RE: NNS12AA95T, Potable Water System Upgrades, Stennis Space Center, MS; Sauer Job No. 1603

SUBJECT: FCR-015/17, Fire Main Tie In at Bldg. 1022 and Installation of PVC Connection at Building 8200 Cost Proposal

Mr. Piccolo,

We herein submit our formal cost proposal covering the cost to furnish, and install all work as detailed in FCR's 015 and 17. The work includes the installation of a connection of the fire main serving Bldg. 1022 that was discovered during investigations to the new HDPE water line.

Also FCR 17 includes the installation of a new PVC line to tie into the identified 1" PVC water main at Building 8200.

We received official FCR's for this change condition based on the RFI's from our subcontractor SHA. Our cost proposal contains breakdowns from Sauer and our subcontractor SH Anthony.

We are currently requesting an additional five (5) calendar day time to complete this work.

If you have any questions or wish to discuss further do not hesitate to call us directly.

(b)(6) sent on behalf of (b)(6)

SAUER INCORPORATED

(b)(6) Project Manager

PROPOSAL/ESTIMATE FOR CONTRAC	CT MODIFICATION	9/16/13
CONTRACT TITLE:	NNS12AA95T, Potab	le Water System Upgrades, Stennis Space Center, MS; Sauer Job No. 1603
DESCRIPTION: FCR-015,	/17, Fire Main Tie	In at Bldg. 1022 and Installation of PVC Connection at Building 8200
		Cost Proposal
PRI	ME CONTRACTOR'S	WORK Revisions/Comments
1. Direct Materials		
2. Sales Tax on Materials	% of line 1	
3. Direct Labor		
4. Restocking fee	% of line 3	
5. Rental Equipment		(b)(6)
6. Sales Tax on Rental Equipment	% of line 5	(B)(O)
7. Equipment Ownership and Operating Exper	ises	
8. SUBTOTAL ( add lines 1 - 7)		
9. Field Overhead	% of line 8	
10. SUBTOTAL (Add lines 8 & 9)		
Prime Remarks:		
CI	IBCONTRACTOR'S	WORK
11. Direct Materials	DECONTRACTOR 3	0
11. Direct Materials 12. Sales Tax on Materials	% of line 11	0.00% 0
13. Direct Labor		0
14. Insurance, Taxes, and Fringe Benefits	% of line 13	0.00% 0
15. Rental Equipment		0
16. Sales Tax on Rental Equipment	% of line 15	0.00% 0
17. Equipment Ownership and Operating Expe	_	0
18. SUBTOTAL (add lines 11 - 17)		
19. Field Overhead	% of line 18	0.00% 0
20. SUBTOTAL (Add lines 18 & 19)		0
21. Home Office Overhead	% of line 20	0.00% 0
22. Profit	% of line 20	10.00% 0
23. SUBTOTAL (Add Lines 20-22)		32,462 SHA Total
Sub's Remarks: SH Anthony	\$32,461.53	3
	SUMMARY	
24. Prime Contractor's Work (from Line 10)		
25. Sub-Contractor's Work (from line 23)		
26. SUBTOTAL (add lines 24 & 25)	0/ -41: 0	
27. Prime Overhead	% of Line 2	
28. Prime Profit	% of Line 24 % of Line 20	(8)(6)
29. Gross Receipts Tax	% OF LINE 20	
30. SUBTOTAL (add lines 26 -29) 31. Prime Contractor's Bond Premium	% of Line 30	
32. TOTAL COST (Add Lines 30 & 31)	70 OI LING O	
Estimated time extension and justif	ication	
Please see attached cover letter.	· = = · <del>• · = ·</del> ·	
Prime Contractor: Sauer Incorporat	ed, d/b/a Sauer S	outheast
Subcontractor:	,	
Sig		0-11-12
(b)(6)		Date 9-16-13
(2/(2)		Project Engineer
S/N 0105-L ₍ F-005-6900		

		MSAAP, Phase II Main Line Redesign Extended Ov	erhead Bre	eakdown			
	updated:	9/17/13 Field Overhead	Daily	Allocated to		Total Extended	
Item #	QTY	Description	Rate	MSAAP	Monthly Rate	Overhead	
1	1						5
2	1						
3	1						
4	0						
5	1						
6	1						
7	1						
8	1						
9	1						
10	1						
11	1						
12	1						
13	1						
14	<b>—</b>						
15	1 1						
16 17	1						
18	1 1						
19	1						
20	1						\$3,697.50
21	<del>                                     </del>						
22	1						
23	1						
24	1						
Rates							
			-	-			
	<del> </del>		1	<b>+</b>			
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	<del>                                     </del>	**Labor rates listed above are inclusive of labor burden and fringe benef	īts				
			L				l



### Change Order Request # FCR-017 / SHA RFI-

#### CHANGE ORDER REQUEST NAME: Install Line to BLD 8200

#### Job # 1037

SCOPE OF WORK	SH	A LABOR	IV	IATERIAL	SUE	CONTRACT	EC	QUIPMENT	0	THER	TOTAL
FCR-017 / RFI-014	\$	7,659.76	\$	1,957.90	\$	1,545.00	\$	2,904.41			\$ 14,067.07
											\$ -
											\$ -
Base Total	\$	7,659.76	\$	1,957.90	\$	1,545.00	\$	2,904.41	\$	-	\$ 14,067.07
Material Tax (9%)					\$	-					\$ -
Tax and Bond (5.97%)											\$ 880.09
Misc. Labor Burden 37%											\$ 674.88
											\$ 15,622.04
Fee(15%)											\$ 2,343.31
Total											\$ 17,965.35

DESCRIPTION:	Additional branch line to Guard House Bld 8200	Station 155+15	OPEN CUT

ADDITIONAL TIME REQUESTED:

3 days

SIGNED BY:

DATE:

(b)(6)

Project Manager

(b)(6)



#### * All Rates Match Original Cost Breakdown Sheet

	Qty of		Straight	Straight		Overtime		
Labor	Men	Hrs	Time Rate	Time	OT Hrs	Rate	Over Time	TOTAL
Sr. Project Manager	1	4	76.60	306.4		95.75	\$ -	\$ 306.40
Project Manager	1	8	73.80	590.4		92.25	\$ -	\$ 590.40
Sr. Superintendent	1		66.30	0		82.88	\$ -	\$ -
Superintendent	1	24	62.92	1510.08	0	88.09	\$ -	\$ 1,510.08
Safety Manager	1	16	73.80	1180.8	8	92.25	\$ 738.00	\$ 1,918.80
Quality Control	1	24	62.92	1510.08	0	88.09	\$ -	\$ 1,510.08
Operator - Equipment	1	16	15.00	240	8	22.50	\$ 180.00	\$ 420.00
Pipelayer			14.00	0		21.00	\$ -	\$ -
Skilled Laborer	2	40	13.50	1,080.00	8	20.25	\$ 324.00	\$ 1,404.00
Skilled Laborer	T		31.08	0		46.62	\$ -	\$ -
							\$ -	\$ -
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							\$ -	\$ -
							\$ -	\$ -
							\$ -	\$ -
							\$ -	\$ -
							\$ -	\$ -
							\$ -	\$ -

1824.00

5835.76 7659.76 Mgmt

Materials	Units	Qty	Unit Price	Total
Fiber Concrete	CY	15	89.00	1,335.00
16" x 1" Service Saddle	EA	1	130.00	130.00
DR9 HDPE 4710	Roll	1	90.00	90.00
Corp Stop 1" CC x CTS	EA	1	65.00	65.00
Ball Curb 1" CTS x CTS	EA	2	83.95	167.90
Tracer Wire	LF	125	0.15	18.75
Tape	Roll	1	30.00	30.00
SS Stiffner	EA	5	2.25	11.25
2 1/2 x 30-42 92D Curb Box	EA	2	55.00	110.00
				1.057.00

Subcontractors	Units	Qty	Price	Total
Bhate Testing	LS	1	825	825
All Around Concrete (Saw Cut)	LF	200	3.6	720
				0
				1,545.00

Units	Qty	Price	Total
HRS	24	90	2160
Day	1	95	95
HRS	4	75	300
Day	1	95	95
Day	1	174.41	174.41
Day	1	80	80
			0
			0
			0
			0
			0
			0
			0
			0
			0
	HRS Day HRS Day	HRS         24           Day         1           HRS         4           Day         1           Day         1	HRS 24 90 Day 1 95 HRS 4 75 Day 1 95 Day 1 174.41

2,904.41

National Aeronautics and Space Administration John C. Stennis Space Center Stennis Space Center, MS 39529-6000



August 1, 2013

Reply to Attn of: RA10/13-1254DAW

Sauer Incorporated Attn: (b)(6) 11223 Phillips Pkwy, Drive East Jacksonville, FL 32256-1574

Subject: EMI: 11B315-01 Upgrades to Potable Water System, NASA Contract: NNS12AA95T

The following answer is in response to your Requests for Information:

#### RFI 015 Questions:

Please reference Drawing C-403 at Sta. 135+42

On Drawing C-403 at Sta. 135+42, during subsurface investigation, a 6" water main was located; however this line was not shown on the Contract Drawings.

If this line is active, a new connection will need to be installed.

This will require a FCR for the cost and additional time.

Attached C-403 Drawing with newly located water main shown. Attached is SHA Drawing P3-03, Subsurface Location Drawing, showing the location of the newly located line?

#### Answer:

The 6" line identified is the Fire Main serving Building 1022. This line is active and requires connection to the new HDPE water line. This line is believed to be C-900.

An additional 2-1/2" line is located to the east of this line. This is the potable water line serving Building 1022. This line is active and requires connection to the new HDPE water line. This line is believed to be PVC.

Both lines shall have isolation valves and valve boxes installed near the connection to the new HDPE line. Current isolation valves for each line exist near the building and at the taps to the existing main water line.

NOTE: ** "Any comment that result in a change to the contract cost, scope, or schedule you must notify the Contracting Officer for approval prior to implementation or any costs are incurred."

If you have any questions, give me a call at 228-688-1655.

Dale A. Woolridge Contracting Officer's Technical Representative

Enclosure

cc:

Jacobs-FOSC

(b)(6)
ficial File



### REQUEST FOR INFORMATION

(Implemented by SOI-8040-0001-FACENG)

Request For	Information	(RFI) Number
-------------	-------------	--------------

015 Water Main Installation and Tie In to Existing System

Date

Requestor

Contract

July 24, 2013

SAUER, INC

NNS12AA95T

#### Question:

Please reference Drawing C-403 at Sta. 135+42

On Drawing C-403 at Sta. 135+42, during subsurface investigation, a 6" water main was located, however this line was not shown on the Contract Drawings.

If this line is active, a new connection will need to be installed.

This will require a FCR for the cost and additional time.

Attached C-403 Drawing with newly located water main shown.

Attached is SHA Drawing P3-03, Subsurface Location Drawing, showing the location of the newly located line.

#### Answer:

The 6" line identified is the Fire Main serving Building 1022. This line is active and requires connection to the new HDPE water line. This line is believed to be C-900.

An additional 2-1/2" line is located to the east of this line. This is the potable water line serving Building 1022. This line is active and requires connection to the new HDPE water line. This line is believed to be PVC.

Both lines shall have isolation valves and valve boxes installed near the connection to the new HDPE line. Current isolation valves for each line exist near the building and at the taps to the existing main water line.CSW



#### Change Order Request # FCR-015 / SHA RFI-015

CHANGE ORDER REQUEST NAME: Provide Tie in for 6" and 2.5" going to BLD 1022

#### Job # 1037

Total											\$	14,496.18
											\$	-
Fee(15%)											\$	1,890.81
											\$	12,605.38
Misc. Labor Burden 37%											\$	479.52
Tax and Bond (5.97%)											\$	710.15
Material Tax (9%)					\$	-					\$	-
Base Total	\$	5,233.84	\$	3,121.87	\$	-	\$	3,060.00	\$	-	\$	11,415.71
											\$	-
											\$	-
FCR-015 / RFI-015	\$	5,233.84	\$	3,121.87	\$	-	\$	3,060.00			\$	11,415.71
SCOPE OF WORK	SH	A LABOR	I	IATERIAL	SUBC	CONTRACT	EC	QUIPMENT	01	HER	ļ	TOTAL

DESCRIPTION: Building 1022	RFI-015 Station 135+42 Drawing Sheet C403	6" Fire Main and 2.5" Potable Water to

ADDITIONAL TIME REQUESTED:

2 days

SIGNED BY: DATE:

Project Manager
(b)(6)



#### * All Rates Match Original Cost Breakdown Sheet

	Qty of		Straight Time	Straight		Overtime			
Labor	Men	Hrs	Rate	Time	OT Hrs	Rate	Over Time		TOTAL
Sr. Project Manager	1	2	76.60	153.2		95.75	\$ -	\$	153.20
Project Manager	1	6	73.80	442.8		92.25	\$ -	\$	442.80
Sr. Superintendent	1		66.30	0		82.88	\$ -	\$	-
Superintendent	1	16	62.92	1006.72	0	88.09	\$ -	\$ 1	,006.72
Safety Manager	1	8	73.80	590.4	8	92.25	\$ 738.00	\$ 1	,328.40
Quality Control	1	16	62.92	1006.72	0	88.09	\$ -	\$ 1	,006.72
Operator - Equipment	1	15	15.00	225	8	22.50	\$ 180.00	\$	405.00
Pipelayer			14.00	0		21.00	\$ -	\$	-
Skilled Laborer	2	15	13.50	405.00	8	20.25	\$ 324.00	\$	729.00
Skilled Laborer	1	0	13.50	0	8	20.25	\$ 162.00	\$	162.00
							\$ -	\$	-
							\$ -	\$	-
							\$ -	\$	-
							\$ -	\$	-
							\$ -	\$	-
							\$ -	\$	-
							\$ -	\$	-
							\$ -	\$	-

Mgmt 1296.00 3937.84 5233.84

Materials	Units	Qty	Unit Price	Total
16x10 DR11 DIPS reduce T Fab	Ea	1	625.00	625.00
10x3 DR11 Red T w/ 3" FLG	Ea	1	160.40	160.40
10x6 DIPS DR11 conc Reduc	Ea	1	168.50	168.50
6 MJ C509 RW Gate Valve	Ea	1	425.00	425.00
6 DIPS DR11 90	Ea	2	52.86	105.72
6 DIPS MJ Adapter DR11	Ea	2	250.00	500.00
3 FxF C509 Gate Valve	Ea	1	335.00	335.00
3 FF Accessory Pack	Ea	1	17.50	17.50
3x2.5 Companion Flange	Ea	1	55.00	55.00
2.5 Sch40 PVC Male Adapter	Ea	1	4.25	4.25
2.5 SCh40 PVC PE Pipe	lf	20	4.75	95.00
2.5 Sch40 PVC 90	Ea	1	4.50	4.50
2.5 SCh40 Coupling	Ea	1	3.25	3.25
6X12 MJ Long Sleeve C153	Ea	1	98.75	98.75
6 MJ Restraint Kit w/ SS bolts	Ea	2	75.00	150.00
6 Stiffners	Ea	2	42.00	84.00
5 .25x27x37 2pc Valve Box	Ea	2	145.00	290.00
				3,121.87

Equipment	Units	Qty	Price	Total
Kubota 121 Excavator (MINI)	HRS	9	60	540
Kubota KX80 Excavator (mini)	HRS	8	90	720
Case 450 skid steer	HRS	3	75	225
Case 210 Excavator	HRS	3	150	450
Kobelco 210	HRS	3	150	450
Compactor	Day	1	95	95
Case 160 Excavator	HRS	3	165	495
Grade/Laser Equipment				0
Dewatering Equipment	DAY	1	85	85
Misc. Equipment (saws/generators/g	ressure v	vasher)		0
Boring Equipment				0
Response and Testing Equipment				0
Confined Space Equipmnet				0
Vacuum Truck & Jetting Equipment	WK	0	1483.26	0
Video Inspection Equipment				0
-			:	3,060.00

National Aeronautics and Space Administration

John C. Stennis Space Center Stennis Space Center, MS 39529-6000



August 1, 2013

Reply to Attn of: RA10/13-1253DAW

Sauer Incorporated
Attn (b)(6)
11223 Phillips Pkwy, Drive East
Jacksonville, FL 32256-1574

Subject: EMI: 11B315-01 Upgrades to Potable Water System. NASA Contract: NNS12AA95T

The following answer is in response to your Requests for Information:

#### **RFI 014 Questions:**

Please reference Drawing C-404 at Sta. 155+15

Per a comment on Transmittal 049, a 1" PVC water Main that would service Building 8200 is not shown on the design. After field verification of this line it has been confirmed that it is a 1" PVC line. The location of the line is under concrete between the valve and the Building; however, the size was determined inside the Building. The Building has one bathroom.

#### Information needed:

- 1. Will the new line need to be installed via open cut which will require the removal and replacement of approximately 80LF of asphalt and limestone base material or will the line need to be installed via HDD?
- 2. Will the use of a 16"x1" Tapping Saddle be allowed at the 16" HDPE line?
- 3. What type of pipe is required for the service?

#### Answer:

- 1. Install the new line by open cut. Patch cut through parking area and road with limestone base material and concrete in lieu of the asphalt topping.
- 2. A stainless steel tapping saddle shall be used to make connection. Within 5' of the tap, install an isolation valve and valve box.
- 3. The line shall be PVC to match the existing line.

NOTE: ** "Any comment that result in a change to the contract cost, scope, or schedule you must notify the Contracting Officer for approval prior to implementation or any costs are incurred."

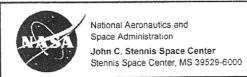
If you have any questions, give me a call at 228-688-1655.

Dale A. Woolridge Contracting Officer's Technical Representative

Enclosure

cc: Jacobs-FOSO

(b)(6)
Official File



### REQUEST FOR INFORMATION

(Implemented by SOI-8040-0001-FACENG)

Request F	or Inform	ation (R	FI)	Number
-----------	-----------	----------	-----	--------

014 Installation of PVC Connection to Building 8200

Date

Requestor

Contract

July 24, 2013

SAUER, INC

NNS12AA95T

#### Question:

Please reference Drawing C-404 at Sta. 155+15

Per a comment on Transmittal 049, a 1" PVC water Main that would service Building 8200 is not shown on the design. After field verification of this line it has been confirmed that it is a 1" PVC line. The location of the line is under concrete between the valve and the Building, however, the size was determined inside the Building. The Building has one bathroom.

#### Information needed:

- 1. Will the new line need to be installed via open cut which will require the removal and replacemnet of approximately 80LF of asphalt and limestone base material or will the line need to be installed via HDD?
- 2. Will the use of a 16"x1" Tapping Saddle be allowed at the 16" HDPE line?
- 3. What type of pipe is required for the service?

#### Answer:

- 1. Install the new line by open cut. Patch cut through parking area and road with limestone base material and concrete in lieu of the asphalt topping.
- 2. A stainless steel tapping saddle shall be used to make connection. Within 5' of the tap, install an isolation valve and valve box. JWLC
- 3. The line shall be PVC to match the existing line.CSW

Page 103 redacted for the following reason:
(b)(7)(F)

#### **RENTAL QUOTE**



#### HERTZ EQUIPMENT RENTAL CORPORATION

Office:
Fax:
Cell:
Email:

Branch #: 9430

Date: 9/6/2013

Sales Rep: (b)(6

**Customer Information** 

Name: SH Anthony

Contact: (F)(6)
Address: PO Box 3719
City, State: Gulfport, MS
Zip: 39505

Phone: (228) 896-7310

Fax:

Job Site Information

Name: Stennis Space Center

Contact: (6)(6)
Address: 1000 Trent Lott
City, State: Stennis, Ms

Zip: Phone:

Fax: (b)(6

		Rental Rates Rental		Estimated		
Qty	Description	Day	Week	4 Week	Term	Total
1	Concrete Vibrator 2 HP Electric	63.00	153.00	441.00	1 [	63.00

Rental Quote is valid through: 09/30/13

Sub Total 63.00
Transportation Charges 100.00
Loss Damage Waiver N Declined
Environmental Recovery Fee 0.00
Estimated Taxes 7.00% 11.41
Estimated Total \$174.41

Comments :

Thanks (6)(6) let me know if you have any questions or concerns!

This price quote is for information purposes only and does not constitute an offer to rent or sell goods or equipment. All rentals or sales shall be subject to the terms and conditions of Hertz's Rental Contract or Sales Invoice.

# All Around Concrete Cutting, Inc.

P.O. Box 2094 Kenner, Louisiana 70063

Office (504) 739-9166

Watts 1-888-CUT4U56

Fax (504) 739-9163

$\underline{\mathbf{QUOTE}}$
September 9, 2013
VIA E-MAIL: (b)(6)
Company: SH Anthony
Attention: (b)(6)
Job Location: Stennis
Quote for the above referenced job:
SAW CUTTING:
• (2) 100' x 4" asphalt \$ 720.00
Minimum per day charge.  Price includes hitting typical steel.  Additional charge will be incurred for any stand-by time.  The customer must provide all lay-out.  Any adjustments of footage, greater or lesser, the price will be adjusted accordingly.  Monday - Friday day work only.  JOB QUOTE MUST BE SIGNED, DATED AND FAXED BACK BEFORE WE CAN SCHEDULE THE JOB.  Signed:
Approved by:
All Around Concrete Cutting, Inc.

Please Note: This quotation is valid for ten (10) days from the submission date. Email: allaroundconcrete@yahoo.com Website: www.allaroundconcretecutting.com

#### National Aeronautics and Space Administration John C. Stennis Space Center Stennis Space Center, MS 39529-6000

#### FIELD CHANGE REQUEST (FCR)

NNS12AA95T-FCR No 017 Contract No. NNS12AA95T

SAUER, INC. Contractor Initiator/Company S H Anthony **EMI No.** 11B315-01 Spec./Section 12G00-G020/33 11 00 Drawing No. C-404 Date 06 September 2013 Description of problem and recommended change: Potable Water System Upgrades P: See RFI 014, attached. S: We propose to install a 1" gate valve and connect. We will maintain 10-feet seperation between the pipes. We will install a 16x1 tapping sleeve and a 1" corporation stop and a 1" gate valve. □ No X Yes Cost Impact Not to Exceed No. Yes Schedule Impact No. of Days Project Manager CQCM Date 06 September 2013 **DISPOSITION (NASA) Evaluation:** NASA Project Manager Date Construction Engineer Date _____ Quality Engineer Safety Engineer Date _____ Environmental Date Design Engineer Date ____ Date _____ **CCB** Chair CCB Approved for Implementation Yes □ No COTR Date **Contracting Officer** 

SSC-61 (08/2013) (MS Word)

Page 107 redacted for the following reason:
(b)(7)(F)

National Aeronautics and Space Administration

John C. Stennis Space Center Stennis Space Center, MS 39529-6000



August 1, 2013

Reply to Attn of: RA10/13-1253DAW

Sauer Incorporated
Attn: (b)(6)
11223 Phillips Pkwy, Drive East
Jacksonville, FL 32256-1574

Subject: EMI: 11B315-01 Upgrades to Potable Water System. NASA Contract: NNS12AA95T

The following answer is in response to your Requests for Information:

#### RFI 014 Questions:

Please reference Drawing C-404 at Sta. 155+15

Per a comment on Transmittal 049, a 1" PVC water Main that would service Building 8200 is not shown on the design. After field verification of this line it has been confirmed that it is a 1" PVC line. The location of the line is under concrete between the valve and the Building; however, the size was determined inside the Building. The Building has one bathroom.

#### Information needed:

- 1. Will the new line need to be installed via open cut which will require the removal and replacement of approximately 80LF of asphalt and limestone base material or will the line need to be installed via HDD?
- 2. Will the use of a 16"x1" Tapping Saddle be allowed at the 16" HDPE line?
- 3. What type of pipe is required for the service?

#### Answer:

- 1. Install the new line by open cut. Patch cut through parking area and road with limestone base material and concrete in lieu of the asphalt topping.
- 2. A stainless steel tapping saddle shall be used to make connection. Within 5' of the tap, install an isolation valve and valve box.
- 3. The line shall be PVC to match the existing line.

NOTE: ** "Any comment that result in a change to the contract cost, scope, or schedule you must notify the Contracting Officer for approval prior to implementation or any costs are incurred."

If you have any questions, give me a call at 228-688-1655.

Dale A. Woolridge Contracting Officer's Technical Representative

Enclosure

cc:

Jacobs-FOSC





### REQUEST FOR INFORMATION

(Implemented by SOI-8040-0001-FACENG)

Reguest For Information (RFI) Number 014 Installation of PVC Connection to Building 8200

Date July 24, 2013 Requestor

SAUER, INC

Contract

NNS12AA95T

Question:

Please reference Drawing C-404 at Sta. 155+15

Per a comment on Transmittal 049, a 1" PVC water Main that would service Building 8200 is not shown on the design. After field verification of this line it has been confirmed that it is a 1" PVC line. The location of the line is under concrete between the valve and the Building, however, the size was determined inside the Building. The Building has one bathroom.

#### Information needed:

- 1. Will the new line need to be installed via open cut which will require the removal and replacement of approximately 80LF of asphalt and limestone base material or will the line need to be installed via HDD?
- 2. Will the use of a 16"x1" Tapping Saddle be allowed at the 16" HDPE line?
- 3. What type of pipe is required for the service?

#### Answer:

- 1. Install the new line by open cut. Patch cut through parking area and road with limestone base material and concrete in lieu of the asphalt topping.
- 2. A stainless steel tapping saddle shall be used to make connection. Within 5' of the tap, install an isolation valve and valve box. - JNLC
- 3. The line shall be PVC to match the existing line.CSW

# National Aeronautics and Space Administration John C. Stennis Space Center Stennis Space Center, MS 39529-6000

## FIELD CHANGE REQUEST (FCR)

	enter, MS 39529-6000		FCR No	015A/017A
Contractor	SAUER, INC.		Contract No.	NNS12AA95T
Initiator/Company	Sauer, Inc.		EMI No.	11B315-01
Spec./Section	12G00-G020/		Drawing No.	
			Date	18 December 2013
Description of prob Revised FCR 015A/		ded change:		
Cost Impact	□ No ⊠	Yes	Not to Exceed	
Schedule Impact	□ No □	Yes	No. of Days	
Project Manager	(b)(6)		Date	18 December 2013
		DISPOSITIO	N (NASA)	
Evaluation:				
NASA Project Manager			Date	
Construction Engineer			Date	
Quality Engineer				
Safety Engineer				
Environmental  Design Engineer			Data	
CCB Chair			Date Date	_
CCB Approved for Implem	nentation Yes	No		
COTR			Date	
Contracting Officer			Date	

SSC-61 (08/2013) (MS Word) (See reverse for instructions)

#### FIELD CHANGE REQUEST (FCR) INSTRUCTIONS

#### PURPOSE:

The Field Change Request (FCR) is used to document, track, and implement changes. The FCR may be initiated by anyone associated with the project.

An FCR is initiated to document the following:

- a. Discrepancies that may exist between the drawings/specifications and field conditions.
- b. Inconsistencies in the drawings and/or specifications.
- c. Recommended design or specification changes that do not affect form, fit, or function (variance).
- d. Changes that are necessary to correct deficiencies in the design or specification.

An FCR may also be initiated by the PMD Office to request that the Contractor evaluate, for cost and schedule impact, proposed changes to the drawings/specifications.

#### **INSTRUCTIONS:**

#### **INITIATOR** -

- 1. Provide all information requested at the top of the FCR form.
- 2. Describe the recommended change; provide rationale and justification in detail.
- 3. List all documentation affected, including revision.
- 4. Provide all redlined documentation with the FCR within 2 working days.
- 5. FCR number will be given by Configuration Control.

#### **CONTRACTOR** -

- Cost/schedule impacts must be determined and noted in the space provided.
   Attach additional details, if necessary.
- 2. All FCRs must be signed by the Project Manager.
- Submit the FCR to NASA for evaluation and disposition. NOTE: Change may NOT be implemented until written approval is received from the Contracting Officer.

#### NASA -

- 1. The designated PMD engineer evaluates the change and determines the appropriate disposition.
- 2. Submit the FCR to the CCB/TRG for review and concurrence.
- 3. All changes that impact cost or schedule must be submitted to the Contracting Officer for approval.
- 4. Submit changes that affect configuration to the Configuration Control Board (CCB) within 5 working days.
- 5. Provide a copy of the completed FCR to the Contractor.
- 6. Provide the original FCR to Configuration Control.

PROPOSAL/ESTIMATE FOR CONTRA	CT MODIFICATION		12/19/13
CONTRACT TITLE:	NNS12AA95T, Potab	le Water System Upgrades, Stennis Space Center, MS; Sa	uer Job No. 1603
DESCRIPTION: REVIS	EDFCR-015/17, Fi	ire Main Tie In at Bldg. 1022 and Installation	of PVC Connection at
		Building 8200 Cost Proposal	
PR	ME CONTRACTOR'S	S WORK	Revisions/Comments
Direct Materials			
2. Sales Tax on Materials	% of line 1		
3. Direct Labor			
Restocking fee	% of line 3		
5. Rental Equipment			
Sales Tax on Rental Equipment	% of line 5		
7. Equipment Ownership and Operating Expe	enses		
8. SUBTOTAL ( add lines 1 - 7)			
9. Field Overhead	% of line 8		
10. SUBTOTAL (Add lines 8 & 9)			
Prime Remarks:			
S	UBCONTRACTOR'S	WORK	
11. Direct Materials	OBCONTRACTOR 5	0	
12. Sales Tax on Materials	% of line 11	0.00%	
13. Direct Labor	/// 0/ /// //	0.0070	
14. Insurance, Taxes, and Fringe Benefits	% of line 13	0.00%	
15. Rental Equipment		0	
16. Sales Tax on Rental Equipment	% of line 15	0.00%	
17. Equipment Ownership and Operating Exp		0	
18. SUBTOTAL ( add lines 11 - 17)			
19. Field Overhead	% of line 18	0.00%	
20. SUBTOTAL (Add lines 18 & 19)		0	
21. Home Office Overhead	% of line 20	0.00%	
22. Profit	% of line 20	10.00%	
23. SUBTOTAL (Add Lines 20-22)		32,687	
Sub's Remarks: SH Anthony	\$32,687.00	)	
	SUMMARY		
24. Prime Contractor's Work (from Line 10)			
25. Sub-Contractor's Work (from line 23)			
26. SUBTOTAL (add lines 24 & 25)			
27. Prime Overhead	% of Line 2		
28. Prime Profit	% of Line 2		
29. Gross Receipts Tax	% of Line 2		
30. SUBTOTAL (add lines 26 -29)			
31. Prime Contractor's Bond Premium	% of Line 3		
32. TOTAL COST (Add Lines 30 & 31)	Goodin a		
Estimated time extension and justi	rication		
Please see attached cover letter.	tod d/h/a Causa C	outhoast	
Prime Contractor: Sauer Incorpora	teu, d/b/a Sauer S	Outrieast	
Subcontractor:			
		Da	te_12/19/13
		roject Engineer	



#### Change Order Request # FCR-017 / SHA RFI-014

#### CHANGE ORDER REQUEST NAME: Install Line to BLD 8200

#### Job # 1037

SCOPE OF WORK	SH	HA LABOR	IV	IATERIAL	SUE	<b>SCONTRACT</b>	EC	QUIPMENT	(	OTHER	TOTAL
FCR-017 / RFI-014	\$	6,334.16	\$	1,957.90	\$	1,921.00	\$	2,970.83			\$ 13,183.89
		·									\$ -
											\$ -
Base Total	\$	6,334.16	\$	1,957.90	\$	1,921.00	\$	2,970.83	\$	-	\$ 13,183.89
Tax and Bond (5.97%)											\$ 832.40
Misc. Labor Burden 37%											\$ 759.24
											\$ 14,775.53
Fee(15%)											\$ 2,216.33
Total											\$ 16,991.87

DESCRIPTION:	Additional branch line to Guard House Bld 8200	Station 155+15	OPEN CUT

ADDITIONAL TIME REQUESTED:

5 days

SIGNED BY:

DATE:

(b)(6)

Project Manager

(b)(6)



#### * All Rates Match Original Cost Breakdown Sheet

	Qty of		Straight	Straight		Overtime		
Labor	Men	Hrs	Time Rate	Time	OT Hrs	Rate	Over Time	TOTAL
Sr. Project Manager	1	4	76.60	306.4		95.75	\$ -	\$ 306.40
Project Manager	1	4	73.80	295.2		92.25	\$ -	\$ 295.20
Sr. Superintendent	1		66.30	0		82.88	\$ -	\$ -
Superintendent	1	12	62.92	755.04	0	88.09	\$ -	\$ 755.04
Safety Manager	1	16	73.80	1180.8	8	92.25	\$ 738.00	\$ 1,918.80
Quality Control	1	16	62.92	1006.72	0	88.09	\$ -	\$ 1,006.72
Operator - Equipment	1	24	15.00	360	8	22.50	\$ 180.00	\$ 540.00
Pipelayer			14.00	0		21.00	\$ -	\$ -
Skilled Laborer	2	40	13.50	1,080.00	8	20.25	\$ 324.00	\$ 1,404.00
Skilled Laborer	1	8	13.50	108		20.25	\$ -	\$ 108.00
							\$ -	\$ -
							\$ -	\$ -
							\$ -	\$ -
							\$ -	\$ -
							\$ -	\$ -
							\$ -	\$ -
							\$ -	\$ -
							\$ -	\$ -

2052.00

Mgmt 4282.16

6334.16

Materials	Units	Qty	Unit Price	Total
Fiber Concrete (120x2x1.5)+10%	CY	15	89.00	1,335.00
16" x 1" Service Saddle	EA	1	130.00	130.00
DR9 HDPE 4710	Roll	1	90.00	90.00
Corp Stop 1" CC x CTS	EA	1	65.00	65.00
Ball Curb 1" CTS x CTS	EA	2	83.95	167.90
Tracer Wire	LF	125	0.15	18.75
Tape	Roll	1	30.00	30.00
SS Stiffner	EA	5	2.25	11.25
2 1/2 x 30-42 92D Curb Box	EA	2	55.00	110.00
	•			1,957.90

 Subcontractors
 Units
 Qty
 Price
 Total

 Bhate Testing
 LS
 1
 825
 825

 All Around Concrete (Saw Cut)
 LF
 200
 3.6
 720

 Micro Methods
 ea
 1
 376
 376

1,921.00

Equipment	Units	Qty	Price	Total
Kubota KX121 Excavator (MINI)	Day	3	296	888
Compactor	Day	2	275	550
Case 450 skid steer	Day	2	312	624
Generator	Day	1	160	160
Concrete Vibrator	Day	1	174.41	174.41
Concrete Finishing Tools	Day	1	80	80
Grade/Laser Equipment				0
Vacuum truck & Jetting Equipment	Day	1	494.42	494.42
				0
				2 970 83

#### Daily Rates Extended

Equipment Type:	Delivery/Pick up Fee	Rental Company	Day	DEQ Fee 1.5%	LDW 15%	Tax 7%	Total
Vac Trailer Net		Volvo	\$400.00				
LDW		Volvo	\$60.00				
ENFE		Volvo	\$6.00				
Tax		Volvo	\$28.42				
Sub-Total		Volvo	\$494.42				
Freight	\$320.00	Volvo	\$320.00				
<u>Total:</u>		<u>Volvo</u>	\$814.42				
10kw Generator	\$320.00	Volvo	\$160.00	\$2.40	\$24.00	\$13.05	\$519.45
	\$400.00	Sunbelt	\$160.00	\$2.40	\$24.00	\$13.05	\$599.45
24" Plate Tamp	\$320.00	Volvo	\$275.00	\$4.13	\$41.25	\$22.43	\$662.80
	\$400.00	Sunbelt	\$280.00	\$4.20	\$42.00	\$22.83	\$749.03
Case 135	\$320.00	Volvo	\$650.00	\$9.75	\$97.50	\$53.01	\$1,130.26
	\$300.00	Hertz	\$785.00	\$11.78	\$117.75	\$64.02	\$1,278.54
	\$800.00	H&E	\$636.00	\$9.54	\$95.40	\$51.87	\$1,592.81
Case 160	\$320.00	Volvo	\$875.00				\$1,410.73
	\$300.00	Hertz	\$925.00	\$13.88	\$138.75		\$1,453.06
	\$800.00	H&E	\$680.00	\$10.20	\$102.00	\$55.45	\$1,647.65
Case 210	\$320.00	Volvo	\$1,200.00				\$1,815.86
	\$300.00	Hertz	\$1,275.00				\$1,889.35
	\$800.00	H&E	\$1,000.00	\$15.00	\$150.00	\$81.55	\$2,046.55
Case 721 Loader	\$320.00	Valvo	\$750.00				\$1,254.91
	\$300.00	Hertz	\$725.00	-			\$1,203.75
	\$800.00	н&Е	\$936.00	\$14.04	\$140.40	\$76.33	\$1,966.77
KX 80	\$320.00	Volvo	\$500.00			\$40.78	
	\$400.00	H&E	\$504.00	\$7.56	\$75.60	\$41.10	\$1,028.26

#### Daily Rates Extended

KX 121	\$320.00	Volvo	\$350.00	\$5.25	\$52.50	\$28.54	\$756.29
	\$400.00	Hertz	\$400.00	\$6.00	\$60.00	\$32.62	\$898.62
	\$400.00	H&E	\$296.00	\$4.44	\$44.40	\$24.14	\$768.98
Highway Sweeper	\$320.00	Volvo	\$400.00	\$6.00	\$60.00	\$32.62	\$818.62
ingilway Sweeper	\$400.00	Hertz	\$345.00	\$5.18	\$51.75	\$28.13	\$830.06
	\$400.00	H&E	\$406.00	\$6.09	\$60.90	\$33.11	\$906.10
450 Skidsteer	\$320.00	Volvo	\$320.00	\$4.80	\$48.00	\$26.10	\$718.90
450 SMusteer	\$400.00	H&E	\$312.00	\$4.68	\$46.80	\$25.44	\$788.92
	4400.00	N. 1	¢cr oo	¢0.00	\$9.75	\$5.30	\$181.03
2hp Conc Vibrator	\$100.00	Volvo	\$65.00	\$0.98		-	-
	\$100.00	Hertz	\$63.00	\$0.95	\$9.45	\$5.14	\$178.53
Dewatering Equip	\$100.00	Volvo	\$95.00	\$1.43	\$14.25	\$7.75	\$218.42



#### Volvo Construction Equipment Rents

RENTAL QUOTE

\$

Total

6,971.32

\$

18,169.94

45,089.87

VOLVO	RENTS	ORDER	NUMBER

Volvo Rents, Inc Date 12/13/2013 Cust. PO Proposal No. Salesman Customer SH ANTHONY Ship To Address Phone Fax Phone X Volvo Rents C.P.U F.O.B. Point of Origin - Ship Via TERMS: Net 30 All Rates are based on a 8 Hour Day, 40 Hour Week & 160 Hour Month Quote good for 60 days TAX RATE: 7% Freight cost are per truckload X Y SHIPPING COST: Delivery 160 Each way LDW: CAT/CLASS TYPE DESCRIPTION DAY WEEK : 4 WEEK QTY \$ 405,00 10 KW Generator \$ 160.00 975.00 1 \$42.73695:00 1 \$ 275.00 1,930.00 24" plate tamp 1 Case 135/ EC145 Excavator \$ 650.00 \$ \$ 1,850.00 4,025.00 \$ 2,900.00 1 \$ 1,200.00 \$ 7,500.00 Case 210/ EC210 Excavator Case 160/ EC160 Excavator \$ 875.00 \$14.2,100.00 \$ 5,150.00 1 \$ \$2,150.00 1 \$ 750.00 5,950.00 Case 721Loader/ L90 \$ 1,250.00 Kubota KX 80/Mini/EC 88 \$ 500.00 \$ 3,145.00 1 1 Kubota KX121 Mini/EC55 \$ 350.00 \$ 1,100.00 2,500.00 1 Highway Sweeper \$ 400.00 \$ 4930.00 \$ 1,875.00 \$ 160.00 \$ 65.00 450.00 1 Concrete Vibrator 2HP Dewatering Pump & Hose \$ 4 245.00 \$ 95.00 689.00 \$ \$1.4 915.00 450 Skidsteer 320.00 2,290.00 Mary Services PR = PURCHASE OF RENTAL EQUIPMENT 5,640.00 \$ 14,700.00 36,479.00 Net Price A = ACCESSORIES P = PARTS S = SERVICE/REPAIR Other Freight LDW \$ 846.00 \$ 2,205.00 5,471.85 ENFE \$ 84.60 \$ 220.50 547.19 For Quote Purposes Only Sales Tax \$ 400.72 \$ 1,044.44 2,591.83



#### Volvo Construction Equipment Rents

RENTAL QUOTE

VOLVO RENTS ORDER NUMBER

	volvo Rents, in	C.										
Cust. F	°0		Proposal No.	Salesman	Salesman (b)(6) Date							
	ustomer SH ANTHONY ddress											
Ph	one	b)(6)	Fax	Phone				Fax_				
F.O.B.	Point of Origin	- Ship Via			Х	Volvo	Rents		C.P.L	J		
TERMS			All Rates are based on a	8 Hour Day, 40 Hour V	Veek & 160 H	lour Mor	nth Quote	good for	60 days			
			Freight cost are per truck	oad								
SHIPP	ING COST:		Freight 160 Each wa	Y				LDW:	Х	Υ	N	
QTY	CAT/CLASS	TYPE	DESC	CRIPTION		Г	DAY	Page V	VEEK 黎瑟·紫		4 WEEK	
1			Vac Tra	iler FX30-7		\$	400.00	\$ 3.5	1,200.00	\$	3,600.00	
1												
1											A	
1												
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1		-										
1		-	Freight i	s each way				-2502 220	and the same			
1								Street, 1				
1						-		1524				
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								wat sa				
								72.1	1111			
								300				
* TYPE	N = NEW L A = ACCESSOR		RENTAL PR = PURCHASE OF RENTA P = PARTS S = SERVICE/REF		Net Price	\$	400.00	\$	1,200.00	\$	3,600.00	
Other					Freight	\$	320.00	\$	320.00	\$	320.00	
					LDW	\$	60.00	\$	180.00	\$	540.00	
		F			ENFE	\$	6.00	\$	18.00	\$	54.00	
	-	For Quo	te Purposes Only		Sales Tax	\$	28.42	\$	85.26	\$	255.78	
					Total	\$	814.42	\$	1,803.26	\$	4,769.78	

MCILLO

Equipment Rental

Page 1 of 2

BRANCH: 430	BILL TO C	BILL TO CUSTOMER: 2833536				SHIPPING ADDRESS					
HERC BILOXI 9291 WEST OAKLAWN ROAD BILOXI, MS 39532 228-396-5441	S H ANTHONY PO BOX 3719 GULFPORT, MS			1037 M	VIS POT WA ARS RD IS SPACE CE	TER NTER, MS 38	¥520				
				228-29	7-6885						
	DESC	RIPTION/CHARGE	S								
EST START: 11/31/13 11:16 SHIPPED BY: ORDER DATE: 11/11/13	EST RETUR! ORDERED BY: SALESPERSON:	N; 12/09/13 (b)(6) 487	11:16	DROP T		DB,					
ORDER DATE: 11/11/13  PO# / JOB#: QUOTE FOR CHANGE ORDE				Rates	subject to	availabí enance serv					
Oty Equipment # 1 EXCAVATOR/4-6 METRIC TON/CR 2460040 /2/		Hrs/ Min 8/ 400.00		Day 400.00		4 Week 2830.00					
EMISSIONS & ENV SURCHARGE  1 EXCAVATOR/14-16 METRIC TON/ 2460070 Case (3)		8/ 785,00	130.83	785.00	2035,00	5399.00	38.77 5399.00				
EMISSIONS & ENV SURCHARGE  1 EXCAVATOR/19-21 METRIC TON/ 2460100 CMSC /60		8/ 525.00	154.17	925.00	2250.00	6250.00	73.97 6250.00				
EMISSIONS & ENV SURCHARGE  1 EXCAVATOR/24-28 METRIC TON/ 2460160 CAR 219		8/ 1275.00	212.50	1275.00	3350.00	8150.00	\$5.63 8150.00				
EMISSIONS & ENV SURCHARGE  1 WHEST LOADER/3 1/2YD/GEN BE 2610350 YAFF 721		8/ 725.00	120.83	725.00	2100.00	\$7\$0.0C	111 66 5750.00				
EMISSIONS & ENV SURCHARGE 1 SWEEDER/RIDE ON/3 WHEEL 7580200	EMISSIONS	8/ 345.00	57.50	345.00	905.00	1855.00	78.78 1855.00				
						CONTI	IUED				

### For GREAT DEALS on USED EQUIPMENT - visit us on-line at www.hertzequip.com

CAREFULLY READ THE TERMS AND CONDITIONS ON REVERSE SIDE OF THIS PAGE

CAREFULLY READ THE LERMS AND CONDITIONS ON REVERSE SIDE OF THIS PAGE.

Notwithstanding dayman of the LOW fee, Customer is faste for all damage to the Equipment and asypores of HERC caused by the Equipment being used or operated in welstoon of the terms and conditions on the Reverse Side of this page is in use to fine AND DAMAGE WAIVER QUIDE.

PARAGRAPH 12: ON THE REVERSE SIDE OF THIS PAGE IS IN LIEU OF (I) ALL WARRANTIES, EXPRESS, IMPLIED OR STATUTORY, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTY OF MERCHANTABILITY AND THE IMPLIED WARRANTY OF FINESS FOR A PARTICULAR PURPOSE; AND (I) ALL OBLIGATIONS ON THE PAGE OF HERC TO CUSTOMER FOR DAMAGES, INCLUDING, BUT NOT LIMITED TO, INDIRECT, INCIDENTAL, CONSEQUENTIAL OR SPECIAL DAMAGES ARISING OUT OF OR IN CONNECTION WITH THE LEASING, MAINTENANCE, USE, OPERATION, STORAGE, ERECTION, DISMANTLING OR TRANSPORTATION OF THE EQUIPMENT, CUSTOMER REPRESENTS THAT HE HAS FULLY INSPECTED THE EQUIPMENT AND THAT SAME IS IN GOOD CONDITION AND REPAIR, CUSTOMER IS LIABLE FOR ALL VIOLATIONS OF LAW ARISING OUT CUSTOMER'S USE, POSSESSION OR OPERATION OF THE EQUIPMENT. THE EQUIPMENT DESCRIBED HEREIN IS RENTED PURSUANT TO AND IN ACCORDANCE WITH THE TERMS AND CONDITIONS SET FORTH ABOVE AND ON THE REVERSE SIDE OF THIS PAGE, CUSTOMER REPRESENTS HAVING READ AND AND AGREED TO SAME. REVERSE SIDE OF THIS PAGE, CUSTOMER REPRESENTS HAVING READ AND AGREED TO SAME.

* Environmental Recovery Fee - If an Environmental Recovery Fee is charged, it is a recovery by HERC to offeet its expenses and coets, including its overhead, for handling, managing, and/or disposing of weste materials associated with the rented equipment that contain hazardous substances, such as motor oil, grease, and/or hydraulic fluid, as well as related administrative cost. THIS IS NOT A GOVERNMENT MANDATED CHARGE.

LOSS AND DAMAGE WAIVER (LDW) IS NOT INSURANCE. The Charge for LDW is 14,00 % of gross rental charges. Customer accepts or declines LDW. If Customer accepts Dawline charges shown above. Leason agrees we waive content charge against obstative for loss of or changes to Equipment, in accordance with one terms and confidence set forth in Paragraph 8, on the Raverse Side of INIs page and In the LOSS AND DAMAGE WAIVER GUIDE which Customer hereby acknowledges receiving.

Custemer acknowledges that the Equipment will be returned in a good, cloan, and unconfer-condition, free of any and all hazardous substances.

Print Custome: Name	Title

Terms are Net 10 Days

Not valid without,

Customer Signature

Carefully read the terms and conditions on reverse side of this page





PC#: 106 3412 BIENVILLE BLVD OCEAN SPRINGS, MS 39564-5732 228-872-6022

Job Site:

S.H. ANTHONY, INC. SATURN DR STENNIS SPACE CENTER, MS 39529

Customer: 542230 S.H. ANTHONY, INC. P.O. BOX 3719

GULFPORT, MS 39503

SUNBELT RENTALS, INC.

Salesman:

Typed By:

QUOTE

Contract #.. 43360982 Contract dt. 12/06/13

Date out.... 12/06/13 12:40 PM Est return.. 1/03/14 12:40 PM

Job Loc .... SATURN DR, STENNIS SPACE CENTER

Job No..... 7 - S.H. ANTHONY, IN

P.O. #..... NR

Ordered By..

NET DUE UPON RECEIPT

QTY	EQUIPMENT #		Min	Day	Week	4 Week	Amount
1.00	10,000 WATT GENERATOR 0080020		63.00	160.00	410.00	980.00	980.00
1.00	1900LB TRACK SKIDSTEER 0480510		325.00	325.00	920.00	2295.00	2295.00
1.00	PLATE TAMPER REVERSIBLE 900 0640250	LB 24" WII	DE 135.00	280.00	700.00	1935.00	1935.00
1.00	SKIDSTEER LOADER BUCKET						N/C
ALES	TTEMS:						
Qty 1	ITEMS: Item number DLPKSRCHG TRANSPORTATION SURCHARGE	Unit EA	Price 38.000				
Qty 1	Item number DLPKSRCHG TRANSPORTATION SURCHARGE ENVIRONMENTAL ENVIRONMENTAL	EA EA					38.00 72.94
Qty 1	Item number DLPKSRCHG TRANSPORTATION SURCHARGE ENVIRONMENTAL	EA	38.000				72.94
Qty 1	Item number DLPKSRCHG TRANSPORTATION SURCHARGE ENVIRONMENTAL ENVIRONMENTAL	EA EA	38.000				

#### Rate your rental experience www.sunbeltrentals.com/survey

IF THE EQUIPMENT DOES NOT WORK PROPERLY, NOTIFY THE OFFICE AT ONCE

MULTIPLE SHIFTS OR OVERTIME RATES MAY APPLY

CUSTOMER IS RESPONSIBLE FOR REFUELING, DAMAGES AND REPAIRS

The total charges are an estimate based on the estimated rental period provided by Customer.

1. The total charges are an estimate based on the estimated rental period provided by Customer.

2. Customer assumes all risks associated with the Equipment during the Rental Period, including injury and damage to persons, property and the Equipment.

3. Customer is responsible for and shall only permit property transed, authorized had are not impaired (under the influence of drugs or alcohol), to use the Equipment.

4. If the Equipment does not beyond property is not suitable for Customer's intended use, does not have operating and safety instructions or Customer has any questions regarding use of the Equipment.

5. Misuse of the Equipment and shall contact Surbelt immediately.

6. Customer has received, read, understands and agrees to the estimated charges herein and all the terms and conditions of this Contract, including the Release and indemnification provision in Section 7 and the Environmental Fee in Section 14, which can also be found at www.sunbeformials.com/rentalcontract. *Delivery/Fickup Surcharge fee explanation is available at Customer must calculate the insection 14 and the provision of the Equipment and the Customer function in Customer is rentling equipment, retain the Fick Up Number given by Sunbeit and will be responsible for Equipment until sectually retrieved by Sunbeit.

8. For operations in Customer is rentling equipment registered under the California Air Resources Board (CARS) Portable Equipment Registration Program (PERF). The operator of the Equipment and CARS registration certificate, including operating conditions and notification requirements of the FERF regulation and local Air Pollution Control District ruies. Under the PERF Regulation, the Customer is required to Keep a copy of the rental agreement and CARS registration certificate, including operating conditions and notification requirements, with the Equipment at all times. Customer must also complete the log provided with the Equipme

Continued on the next page...

# H&E EQUIPMENT SERVICES, INC.

	OUOT	E.									
TO:	F	ROM:	\/0\								
(b)(6)		DATE:	0)(6)								
FAX NUMBER:	L	12/13/13									
COMPANY:											
SH ANTHONY		1									
PHONE NUMBER:	Ç	UOTE NUMBER:									
RE:	Y	OUR REFERENC	E NUMBER:								
□ urgent for review □ ple	ASE COMME	NT PLEA	ASE REPLY	□ please recycle							
Thanks for the opportunity to quot please give me a call @ (b)(6	e on your e	quipment nee	eds. If you h	ave any questions							
	Month	week	day								
1-pc45 mini excavator	1850.00	740.00 2	296.00								
121 - Freight 200.00 each way											
1-pc78-88 excavator	3150.00	1260.00	504.00								
80 - Freight 200.00 each way											
1-pc130 excavator	3975.00	1590 .00	636.00								
Freight 400.00 each way											
1-pc160 excavator	4250.00	1700.00	680.00								
Freight 400.00 each way											
1-pc 210 excavator	6250,00	2500.00	1000.00								
Freight 400.00 each way											
1-ride on street sweeper	1900.00	935.00	406.00								
Freight 200.00 each way											
1-wa380 wheel loader	5850,00	2340.00	936.00								
721 - Freight 400.00 each way											
1-tl240 skid loader 450 - Freight 200,00 each way	1950.00	780.00	312.00								
450 - Tieight 200,00 each way											
Extra fee Environmental 1.5 % of a	rental										
Damage Waver is 15 % of rental +	Tax										
Thank you (b)(6)											

#### RENTAL QUOTE



Sales Rep: (b)(6)

**Customer Information** 

Name: SH Anthony Contact: MAY (SV) Address: PO Box 3719 City, State: Gulfport, MS

Zip: 39505 Phone: (b)(6) Fax:

#### HERTZ EQUIPMENT RENTAL CORPORATION



Name: Stennis Space Center Contact: (15.1/2)

Address: 1000 HEM Con City, State: Stennis, Ms Zip: Phone: (b)(6)

	•	I	Rental	Estimated		
Qty	Description	Day	Week	4 Week	Term	Total
1	Concrete Vibrator 2 HP Electric	63.00	153.00	441.00	1 D	63.00
			-	Sub Total		63.0

Rental Quote is valid through: 09/30/13

Comments: Thanks (b)(6)

let me know if you have any questions or concernsl

This price quote is for information purposes only and does not constitute an offer to rent or sell goods or equipment. All rentals or sales shall be subject to the terms and conditions of Hertz's Rental Contract or Sales Invoice.





## **Stennis Space Center - Potable Water**

Attn: (b)(6)

Estimator:

Sales Person: (b)(6)

Bid Date: September 9,2013

Bid Time: 4:00 PM

Revision: 1 Plans Dated:

Addenda:

Quote Expiration Date:

#### Note: Please Review Notes Below And At The Bottom Of This Quotation

- 1 This material estimate is for bidding purposes only. This is not a guaranteed list of materials, this is our interpretation of the contract documents. Customer shall verify all quantities & estimated materials prior to bidding, pricing and ordering.
- 2 This quotation is limited to material listed within, items not listed shall not be assumed as being included.
- 3 All prices are good 7 days from bid date and are based on shipments of truck load quantities.
- 4 Orders less than a truck load are subject to a price change and additional freight charges
- 5 Material order is based upon customer approval & reciept of approved submittals
- 6 All special order items may not be cancelled after order has been placed
- 7 Returned materials may be assessed a restocking/handling/freight charge
- 8 MJ DI fittings are quoted as AWWA C153 L/A (unless noted otherwise)
- 9 DI pipe, fittings & spools are quoted w/cement lining and bituminous coating (unless noted otherwise)
- 10 Pipe Drawings/Lay schedules & startup are not included in quotation, but can be provided for an additional charge
- 11 All material is quoted as F.O.B shipping point (unless noted otherwise)
- 12 All pipe will be sold in full length quantities
- 13 Per ISCO'S standard terms and conditions
- 14 Prices in effect at time of shipment

QTY	SIZE	DESCRIPTION	IT PRICE	 UNIT TOTAL	
		Station 135+42			
1 ea		16x10 DIPS DR11 Reducing Tee Fabbed	\$	625.00	\$ 625.00
1 ea		10x3 DIPS DR11, Red Tee W/3" FLNG & TING FUSED	\$	160.40	\$ 160.40
1 ea		10x6 DIPS DR11 Conc Reducer	\$	168.50	\$ 168.50
1 ea		6 MJ C509 RW Gate VIv, OL, Op Nut	\$	425.00	\$ 425.00
2 ea		6 DIPS DR11 90 EII	\$	52.86	\$ 105.72
2 ea		6 DIPS MJ Adapter DR11	\$	250.00	\$ 500.00
1 ea		3 FxF C509 RW Gate VIv, OL, OP Nut	\$	335.00	\$ 335.00
1 ea		3 FF Flange Accessory Page	\$	17.50	\$ 17.50
1 ea		3 x 2 1/2 Companion flange	\$	55.00	\$ 55.00
1 ea		2 1/2 Sch40 PVC Male Agapter	\$	4.25	\$ 4.25
20 If		2 1/2 Sch40 PVC PE Pipe	\$	4.75	\$ 95.00
1 ea		2 1/2 Sch40 PVC 90 Bend	\$	4.50	\$ 4.50
1 ea		2 1/2 Sch40 Coupling	\$	3.25	\$ 3.25
1 ea		6x12 MJ Long Sleeve C153 CL/Bit	\$	98.75	\$ 98.75
2 ea		6 MJ Restraint Kit - PVC w/316ss bolts	\$	75.00	\$ 150.00
· 2 ea		6 SS Stiffeners	\$	42.00	\$ 84.00
2 ea		5 1/4x27x37 2pc HD Screw Valve Box	\$	145.00	\$ 290.00
1 ea		3 roll, Detect Tape - Blue/Water	\$	30.00	\$ 30.00
25 lf		12 gauge wire, Blue, Solid	\$	0.15	\$ 3.75
		1	Estimat	ed Subtotal	\$ 3,155.62
		Station 155+15			
1 ea		16x1 Service Saddle	\$	130.00	\$ 130.00
200 lf		1 CTS DR9 HDPE 4710	\$	0.45	\$ 90.00
1 ea		1 Corp Stop CC x CTS	\$	65.00	\$ 65.00
2 ea		1 Ball Curb CTS x CTS	\$	83.95	\$ 167.90
5 ea		1 SS Stiffener	\$	2.25	\$ 11.25
2 ea		2 1/2x30-42 92D Curb Box	\$	55.00	\$ 110.00
1 ea		3 roll, Detect Tape - Blue/Water	\$	30.00	\$ 30.00
125 lf		12 gauge wire, Blue, Solid	\$	0.15	\$ 18.75
		1	Estimat	ed Subtotal	\$ 622.90
		Estimated Project Total:			\$ 3,778.52

Project Notes:

TO: SH Anthony, Inc.

FROM: Micro-Methods, Inc.

6-Dec-13

Stennis Water Main 2 Consecutive Days

PARAMETERS		UNIT PRICE	QUANTITY	EXTENDED COST		
2 - samples pulled/2 consecutive days	\$	376.00	2	\$	752.00	

This price quote does include overtime, weekends, or holidays. 24 hr. notification for scheduling sampling event required.

## All Around Concrete Cutting, Inc.

P.O. Box 2094 Kenner, Louisiana 70063

Office (504) 739-9166

Watts 1-888-CUT4U56

Fax (504) 739-9163

#### **QUOTE**

September 9, 2013

VIA E-MAIL:

(b)(6)

Company: SH Anthony

Attention:



Job Location: Stennis

Quote for the above referenced job:

#### **SAW CUTTING:**

• (2) 100' x 4" asphalt

\$ 720.00

Minimum per day charge.

Price includes hitting typical steel.

Additional charge will be incurred for any stand-by time.

The customer must provide all lay-out.

Any adjustments of footage, greater or lesser, the price will be adjusted accordingly.

Monday - Friday day work only.

#### JOB QUOTE MUST BE SIGNED, DATED AND FAXED BACK BEFORE WE CAN SCHEDULE THE JOB.

Signed:	 
Approved by:	

(b)(6)

All Around Concrete Cutting, Inc.

Please Note: This quotation is valid for ten (10) days from the submission date.

Email: allaroundconcrete@yahoo.com

• Website: www.allaroundconcretecutting.com

.rom:

Sent: To:

Monday. September 09, 2013 2:59 PM

Subject:

RE: Stennis Potable Water Quote needed

Total for one (1) one-hour visit of soil testing - \$250.00 Total for one (1) concrete pour with separate one (1) concrete pickup and 1 set of 5 test cylinders - \$575

National Aeronautics and Space Administration

John C. Stennis Space Center Stennis Space Center, MS 39529-6000



August 1, 2013

Reply to Attn of: RA10/13-1253DAW

Sauer Incorporated
Attn: (b)(6)
11223 Phillips Pkwy, Drive East
Jacksonville, FL 32256-1574

Subject: EMI: 11B315-01 Upgrades to Potable Water System. NASA Contract: NNS12AA95T

The following answer is in response to your Requests for Information:

#### RFI 014 Questions:

Please reference Drawing C-404 at Sta. 155+15

Per a comment on Transmittal 049, a 1" PVC water Main that would service Building 8200 is not shown on the design. After field verification of this line it has been confirmed that it is a 1" PVC line. The location of the line is under concrete between the valve and the Building; however, the size was determined inside the Building. The Building has one bathroom.

#### Information needed:

- 1. Will the new line need to be installed via open cut which will require the removal and replacement of approximately 80LF of asphalt and limestone base material or will the line need to be installed via HDD?
- 2. Will the use of a 16"x1" Tapping Saddle be allowed at the 16" HDPE line?
- 3. What type of pipe is required for the service?

#### Answer:

- 1. Install the new line by open cut. Patch cut through parking area and road with limestone base material and concrete in lieu of the asphalt topping.
- 2. A stainless steel tapping saddle shall be used to make connection. Within 5' of the tap, install an isolation valve and valve box.
- 3. The line shall be PVC to match the existing line.

NOTE: ** "Any comment that result in a change to the contract cost, scope, or schedule you must notify the Contracting Officer for approval prior to implementation or any costs are incurred."

If you have any questions, give me a call at 228-688-1655.

Dale A. Woolridge Contracting Officer's Technical Representative

Enclosure

cc:
Jacobs-FOSC

(b)(6)

Official File



#### REQUEST FOR INFORMATION

(Implemented by SOI-8040-0001-FACENG)

Req	uest Fo	r Infor	matio	n (RFI)	Num	be	r	
014	Installa	tion of	PVC	Conne	ction	to	Building	8200

Date

Requestor

Contract

July 24, 2013

SAUER, INC

NNS12AA95T

#### Question:

Please reference Drawing C-404 at Sta. 155+15

Per a comment on Transmittal 049, a 1" PVC water Main that would service Building 8200 is not shown on the design. After field verification of this line it has been confirmed that it is a 1" PVC line. The location of the line is under concrete between the valve and the Building, however, the size was determined inside the Building. The Building has one bathroom.

#### Information needed:

- 1. Will the new line need to be installed via open cut which will require the removal and replacemnet of approximately 80LF of asphalt and limestone base material or will the line need to be installed via HDD?
- 2. Will the use of a 16"x1" Tapping Saddle be allowed at the 16" HDPE line?
- 3. What type of pipe is required for the service?

#### Answer:

- 1. Install the new line by open cut. Patch cut through parking area and road with limestone base material and concrete in lieu of the asphalt topping.
- 2. A stainless steel tapping saddle shall be used to make connection. Within 5' of the tap, install an isolation valve and valve box. 5NLC
- 3. The line shall be PVC to match the existing line.CSW

Page 130 redacted for the following reason:
(b)(7)(F)



### Change Order Request # FCR-015 / SHA RFI-015 ORDER REQUEST NAME: Provide Tie in for 6" and 2.5" going to BLD 1022

#### Job # 1037

SH	IA LABOR	M	ATERIAL	SUBC	CONTRACT	EC	UIPMENT		OTHER		TOTAL
\$	5,379.76	\$	3,155.62	\$	376.00	\$	3,448.42			\$	12,359.80
										\$	-
										\$	-
\$	5,379.76	\$	3,155.62	\$	376.00	\$	3,448.42	\$	-	\$	12,359.80
										\$	768.89
										\$	519.48
										\$	13,648.17
										\$	2,047.23
										\$	-
										\$	15,695.40
RFI-01	L5 Station :	135+	42 Drawing	Sheet	C403	6" F	ire Main and	2.5"	Potable Wa	ter to	
	\$	\$ 5,379.76	\$ 5,379.76 \$	\$ 5,379.76 \$ 3,155.62 \$ 5,379.76 \$ 3,155.62	\$ 5,379.76 \$ 3,155.62 \$ \$ 5,379.76 \$ 3,155.62 \$	\$ 5,379.76 \$ 3,155.62 \$ 376.00	\$ 5,379.76 \$ 3,155.62 \$ 376.00 \$ \$ 5,379.76 \$ 3,155.62 \$ 376.00 \$	\$ 5,379.76 \$ 3,155.62 \$ 376.00 \$ 3,448.42 \$ 5,379.76 \$ 3,155.62 \$ 376.00 \$ 3,448.42	\$ 5,379.76 \$ 3,155.62 \$ 376.00 \$ 3,448.42 \$ \$ 5,379.76 \$ 3,155.62 \$ 376.00 \$ 3,448.42 \$	\$ 5,379.76 \$ 3,155.62 \$ 376.00 \$ 3,448.42 \$ - \$ 5,379.76 \$ 3,155.62 \$ 376.00 \$ 3,448.42 \$ -	\$ 5,379.76 \$ 3,155.62 \$ 376.00 \$ 3,448.42 \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$

Building 1022		

ADDITIONAL TIME REQUESTED:

4 days

SIGNED BY:

DATE:

(b)(6) Project Manager (b)(6)



#### * All Rates Match Original Cost Breakdown Sheet

	Qty of		Straight Time	Straight		Overtime		
Labor	Men	Hrs	Rate	Time	OT Hrs	Rate	Over Time	TOTAL
Sr. Project Manager	1		76.60	0		95.75	\$ -	\$ -
Project Manager	1	4	73.80	295.2		92.25	\$ -	\$ 295.20
Sr. Superintendent	1		66.30	0		82.88	\$ -	\$ -
Superintendent	1	12	62.92	755.04	0	88.09	\$ -	\$ 755.04
Safety Manager	1	16	73.80	1180.8	8	92.25	\$ 738.00	\$ 1,918.80
Quality Control	1	16	62.92	1006.72	0	88.09	\$ -	\$ 1,006.72
Operator - Equipment	1	24	15.00	360	8	22.50	\$ 180.00	\$ 540.00
Pipelayer			14.00	0		21.00	\$ -	\$ -
Skilled Laborer	2	16	13.50	432.00	8	20.25	\$ 324.00	\$ 756.00
Skilled Laborer	1	8	13.50	108	0	20.25	\$ -	\$ 108.00
							\$ -	\$ -
							\$ -	\$ -
							\$ -	\$ -
							\$ -	\$ -
							\$ -	\$ -
							\$ -	\$ -
							\$ -	\$ -
							\$ -	\$ -
			•					1404.00

Mgmt 3975.76

5379.76

Materials	Units	Qty	Unit Price	Total
16x10 DR11 DIPS reduce T Fab	Ea	1	625.00	625.00
10x3 DR11 Red T w/ 3" FLG	Ea	1	160.40	160.40
10x6 DIPS DR11 conc Reduc	Ea	1	168.50	168.50
6 MJ C509 RW Gate Valve	Ea	1	425.00	425.00
6 DIPS DR11 90	Ea	2	52.86	105.72
6 DIPS MJ Adapter DR11	Ea	2	250.00	500.00
3 FxF C509 Gate Valve	Ea	1	335.00	335.00
3 FF Accessory Pack	Ea	1	17.50	17.50
3x2.5 Companion Flange	Ea	1	55.00	55.00
2.5 Sch40 PVC Male Adapter	Ea	1	4.25	4.25
2.5 SCh40 PVC PE Pipe	lf	20	4.75	95.00
2.5 Sch40 PVC 90	Ea	1	4.50	4.50
2.5 SCh40 Coupling	Ea	1	3.25	3.25
6X12 MJ Long Sleeve C153	Ea	1	98.75	98.75
6 MJ Restraint Kit w/ SS bolts	Ea	2	75.00	150.00
6 Stiffners	Ea	2	42.00	84.00
3" Water Detect Tape	ea	1	30.00	30.00
12 ga wire, Blue Solid	lf	25	0.15	3.75
5 .25x27x37 2pc Valve Box	Ea	2	145.00	290.00
				3,155.62

Subcontractors	Units	Qty	Price	Total
Micro Methiods	ea	1	376	376
				0
				0
				376.00

Equipment	Units	Qty	Price	Total
Kubota 121 Excavator (MINI)	Day	2	296	592
Case 450 skid steer	Day	1	312	312
Case 210 Excavator	Day	1	1000	1000
Compactor	Day	1	275	275
Case 160 Excavator	Day	1	680	680
Grade/Laser Equipment				0
Dewatering Equipment	DAY	1	95	95
Misc. Equipment (saws/generators/	washer)		0	
Vacuum Truck & Jetting Equipment	Day	1	494.42	494.42
Video Inspection Equipment				0

3,448.42

#### Daily Rates Extended

Equipment Type:	Delivery/Pick up Fee	Rental Company	Day	DEQ Fee 1.5%	LDW 15%	Tax 7%	Total
Vac Trailer Net		Volvo	\$400.00				
LDW		Volvo	\$60.00				
ENFE		Volvo	\$6.00				
Tax		Volvo	\$28.42				
Sub-Total		Volvo	\$494.42				
Freight	\$320.00	Volvo	\$320.00				
<u>Total:</u>		<u>Volvo</u>	\$814.42				
10kw Generator	\$320.00	Volvo	\$160.00	\$2.40	\$24.00	\$13.05	\$519.45
	\$400.00	Sunbelt	\$160.00	\$2.40		\$13.05	•
24" Plate Tamp	\$320.00	Volvo	\$275.00	\$4.13	\$41.25	\$22.43	\$662.80
	\$400.00	Sunbelt	\$280.00	\$4.20	\$42.00	\$22.83	\$749.03
Case 135	\$320.00	Volvo	\$650.00	\$9.75	\$97.50	\$53.01	\$1,130.26
	\$300.00	Hertz	\$785.00	\$11.78	\$117.75	\$64.02	\$1,278.54
	\$800.00	H&E	\$636.00	\$9.54	\$95.40	\$51.87	\$1,592.81
Case 160	\$320.00	Volvo	\$875.00	\$13.13	\$131.25	\$71.36	\$1,410.73
	\$300.00	Hertz	\$925.00	\$13.88	\$138.75	\$75.43	\$1,453.06
	\$800.00	H&E	\$680.00	\$10.20	\$102.00	\$55.45	\$1,647.65
Case 210	\$320.00	Volvo	\$1,200.00		\$180.00	\$97.86	\$1,815.86
	\$300.00	Hertz	\$1,275.00	\$19.13	\$191.25	\$103.98	\$1,889.35
	\$800.00	H&E	\$1,000.00	\$15.00	\$150.00	\$81.55	\$2,046.55
Case 721 Loader	\$320.00	Volvo	\$750.00				\$1,254.91
	\$300.00	Hertz	\$725.00	•			\$1,203.75
	\$800.00	H&E	\$936.00	\$14.04	\$140.40	\$76.33	\$1,966.77
KX 80	\$320.00	Volvo	\$500.00			\$40.78	
	\$400.00	H&E	\$504.00	\$7.56	\$75.60	\$41.10	\$1,028.26

#### Daily Rates Extended

KX 121	\$320.00	Volvo	\$350.00	\$5.25	\$52.50	\$28.54	\$756.29
	\$400.00	Hertz	\$400.00	\$6.00	\$60.00	\$32.62	\$898.62
	\$400.00	H&E	\$296.00	\$4.44	\$44.40	\$24.14	\$768.98
Highway Sweeper	\$320.00	Volvo	\$400.00	\$6.00	\$60.00	\$32.62	\$818.62
	\$400.00	Hertz	\$345.00	\$5.18	\$51.75	\$28.13	\$830.06
	\$400.00	H&E	\$406.00	\$6.09	\$60.90	\$33.11	\$906.10
450 Skidsteer	\$320.00	Volvo	\$320.00	\$4.80	\$48.00	\$26.10	\$718.90
	\$400.00	H&E	\$312.00	\$4.68	\$46.80	\$25.44	\$788.92
2hp Conc Vibrator	\$100.00	Volvo	\$65.00	\$0.98	\$9.75	\$5.30	\$181.03
	\$100.00	Hertz	\$63.00	\$0.95	\$9.45	\$5.14	\$178.53
Dewatering Equip	\$100.00	Volvo	\$95.00	\$1.43	\$14.25	\$7.75	\$218.42

# H&E EQUIPMENT SERVICES, INC.

'O:	F	ROM:	/L\/0\	
(b)(6) AX NUMBER:	D	ATE:	<u>(D)(b)</u>	
		12/13/1	3	
COMPANY:	T	'OTAL NO. OF P	ages includii	NG COVER:
SH ANTHONY	1	1		
HONE NUMBER:	Q	OUOTE NUMBER	R _i	
E: (D)(6)	Y	OUR REFEREN	CE NUMBER:	
URGENT FOR REVIEW   PLE	ASE COMME	NT □ PLE	ASE REPLY	□ please recycli
Thanks for the opportunity to quot please give me a call @ (b)(6)	e on your ed	quipment ne	eds. If you h	ave any questions
	Month	week	day	
1-pc45 mini excavator	1850,00	740.00	296.00	
121 - Freight 200.00 each way				
121 - Freight 200.00 each way 1-pc78-88 excavator	1850.00 3150.00	740.00 1260.00	296.00 504.00	
121 - Freight 200.00 each way 1-pc78-88 excavator 80 - Freight 200.00 each way	3150.00	1260.00	504.00	
121 - Freight 200.00 each way 1-pc78-88 excavator 80 - Freight 200.00 each way 1-pc130 excavator				
121 - Freight 200.00 each way 1-pc78-88 excavator 80 - Freight 200.00 each way 1-pc130 excavator Freight 400.00 each way	3150.00	1260.00	504.00 636.00	
121 - Freight 200.00 each way 1-pc78-88 excavator 80 - Freight 200.00 each way 1-pc130 excavator	3150.00 3975.00	1260.00 1590 .00	504.00 636.00	
121 - Freight 200.00 each way 1-pc78-88 excavator 80 - Freight 200.00 each way 1-pc130 excavator Freight 400.00 each way 1-pc160 excavator	3150.00 3975.00	1260.00 1590 .00	504.00 636.00 680.00	
121 - Freight 200.00 each way 1-pc78-88 excavator 80 - Freight 200.00 each way 1-pc130 excavator Freight 400.00 each way 1-pc160 excavator Freight 400.00 each way	3150.00 3975.00 4250.00	1260.00 1590 .00 1700.00	504.00 636.00 680.00	
121 - Freight 200.00 each way 1-pc78-88 excavator 80 - Freight 200.00 each way 1-pc130 excavator Freight 400.00 each way 1-pc160 excavator Freight 400.00 each way 1-pc 210 excavator	3150.00 3975.00 4250.00	1260.00 1590 .00 1700.00	504.00 636.00 680.00 1000.00	
121 - Freight 200.00 each way 1-pc78-88 excavator 80 - Freight 200.00 each way 1-pc130 excavator Freight 400.00 each way 1-pc160 excavator Freight 400.00 each way 1-pc 210 excavator Freight 400.00 each way	3150.00 3975.00 4250.00 6250.00	1260.00 1590 .00 1700.00 2500.00	504.00 636.00 680.00 1000.00	
121 - Freight 200.00 each way 1-pc78-88 excavator 80 - Freight 200.00 each way 1-pc130 excavator Freight 400.00 each way 1-pc160 excavator Freight 400.00 each way 1-pc 210 excavator Freight 400.00 each way 1-ride on street sweeper	3150.00 3975.00 4250.00 6250.00	1260.00 1590 .00 1700.00 2500.00	504.00 636.00 680.00 1000.00 406.00	
121 - Freight 200.00 each way 1-pc78-88 excavator 80 - Freight 200.00 each way 1-pc130 excavator Freight 400.00 each way 1-pc160 excavator Freight 400.00 each way 1-pc 210 excavator Freight 400.00 each way 1-ride on street sweeper Freight 200.00 each way	3150.00 3975.00 4250.00 6250.00 1900.00 5850.00	1260.00 1590 .00 1700.00 2500.00 935.00	504.00 636.00 680.00 1000.00 406.00	
121 - Freight 200.00 each way 1-pc78-88 excavator 80 - Freight 200.00 each way 1-pc130 excavator Freight 400.00 each way 1-pc160 excavator Freight 400.00 each way 1-pc 210 excavator Freight 400.00 each way 1-ride on street sweeper Freight 200.00 each way 1-wa380 wheel loader	3150.00 3975.00 4250.00 6250.00 1900.00 5850.00	1260.00 1590 .00 1700.00 2500.00 935.00	504.00 636.00 680.00 1000.00 406.00	



#### Volvo Construction Equipment Rents

RENTAL QUOTE

VOLVO R	ENTS ORDER NUMBER	

			, i	,,					
	Volvo Rents, Inc								
Cust.	P0		Proposal No.	Salesman	(b)(6)		Date	<u> 12/</u>	13/2013
Custo	omer SH ANTHO	ONY		Ship To					
Addre	ess								
P	hone	(b)(6)	Fax	Phone			Fax		
F.O.B	. Point of Origin -	Ship Via			X Volve	Rents	C.P.	U	
TERM TAX F			All Rates are based on a 8	Hour Day, 40 Hour Week & 1	60 Hour Mo	onth Quote	e good for 60 days		
			Freight cost are per trucklo				<del></del>	7	
SHIPF	PING COST:		Freight 160 Each way	<u></u>			LDW: X	_ Y	N
QTY	CAT/CLASS	TYPE	DESCI	RIPTION		DAY	WEEK SEES		4 WEEK
1			Vac Trail	er FX30-7	\$	400.00	\$# 1,200.00	_	3,600.00
1							the state of the s		
1						-	POTE SAUMY		
1							100 m 100 m		7
1									
1							11.00		
1			Freight is	each way			2.2		***************************************
1							1 28 5 1 7		
1									
1							ADMINISTRATION OF THE STATE OF	Г	
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							ation of the property of the		
							Mark Control		
'TYPE	N = NEW U : A = ACCESSORIE		RENTAL PR = PURCHASE OF RENTAL P = PARTS S = SERVICE/REPA		e \$	400.00	\$ 1,200.00	\$	3,600.00
Other				Freight	\$	320,00	\$ 320.00	\$	320.00
				LDW	\$	60.00	\$ 180.00	\$	540.00
				ENFE	\$	6.00	\$ ,18.00	\$	54.00
		For Quot	e Purposes Only	Sales Ta		28.42	\$ 85.26	\$	255.78
				Total	\$	814.42	\$ 1,803.26	\$	4,769.78



RENTAL QUOTE

\$

Total

6,971.32 \$

18,169.94 \$

45,089.87

VOL	O RENTS ORDER NUMBER	}

	Value Basis is		Volvo Co	nstruction Equipmen	nt Rents				diamental and a second and the secon			
Cust.	Volvo Rents, Inc.		Proposal No.	Salesma	an (	(b)(6	S)		Date	12/1	3/2013	
Custo Addre	mer <u>SH ANTHO</u> ss	YNC		Ship To	o							
Pi	hone	b)(6)	Fax	Phor	ne			Fax				
FOR	Point of Origin -	Shin Via			X	TVolve	Rents		C.P.U	ı		
TERM TAX R	S: Net 30	0	All Rates are based on a 8	Hour Day, 40 Hou		_		good f	or 60 days			
SHIPP	PING COST:		Freight cost are per trucklo  Delivery 160 Each way					LDW:	Х	Y		Ν
QTY	CAT/CLASS	TYPE	DESC	RIPTION		Т	DAY	為機	WEEK##		4 WEEK	
1			10 KW (	Generator		\$	160.00	\$.50	405.00	\$	975	.00
1			24" pla	ite tamp		\$	275.00	\$ 6	695.00	\$	1,930	.00
1			Case 135/ EC	145 Excavator		\$	650.00	\$,	1,850,00	\$	4,025	.00
1			Case 210/ EC	210 Excavator		\$	1,200.00	\$	2,900:00	\$	7,500	.00
1			Case 160/ EC	160 Excavator		\$	875.00	\$	2,100,00	\$	5,150	.00
1			Case 721l	oader/ L90		\$	750.00	\$	2,150.00	<del>\$\$</del>	5,950	.00
1			Kubota KX 8	30/Mini/EC 88		\$	500.00	\$30	1,250.00	\$	3,145	.00
1			Kubota KX1	21 Mini/EC55		\$	350.00	\$	¥1,100.00	\$	2,500	.00
1			Highway	Sweeper		\$	400.00	\$	930.00	\$	1,875	.00
1			Concrete \	/ibrator 2HP		\$	65.00	\$	160,00	\$	450	.00
			Dewatering I	Pump & Hose		\$	95.00	\$.	245,00	\$	689	.00
			450 SI	kidsteer		\$	320.00	5	1915:00	\$	2,290	.00
								200				
* TYPE	N = NEW U: A = ACCESSORI		RENTAL PR = PURCHASE OF RENTAL P = PARTS S = SERVICE/REPA		Net Price	\$	5,640.00	\$	14,700.00	\$	36,479	0.00
Other					Freight							
					LDW	\$	846.00	\$	2,205.00	\$	5,471	.85
					ENFE	\$	84.60	\$	220.50	\$	547	7.19
		For Quo	te Purposes Only		Sales Tax	\$	400.72	\$	1.044.44	\$	2.591	.83

Equipment Rental

Page 1 of 2

DDANGH, 430	חווי ארם	CHETOUR	. non	2525	1	SHIPPING ADDRESS			
BRANCH: 430		CUSTOME	ru. 503	^^^D					
HERC BILOXI	S H ANTHÓN	YINC			1	NIS POT W	TER		
9291 WEST OAKLAWN ROAD	PO BOX 3719					ARS RD			
BILOXI, MS 39532	GULFPORT, MS	39505			STENN	IIS SPACE CE	ENTER, MS 39	9520	
228-396-6441	***				222.20	7 6205			
	DES	CRIPTION	ICHARGE	2	220-29	7-6885			
EGT 07-07-14-14-14-0					DDDD	DATE:			
EST START: 11/11/13 11:16	EST RETUI		(09/13	11:16					
SHIPPED BY: ORDER DATE: 11/11/13	ORDERED BY: SALESPERSO		161		DROP '	-			
ORDER DATE. TITTITS	OACEOF ENGO	11, 40,				COORDINAY		lite	
PO# / JOB#: QUOTE FOR CHANGE ORDE	R /1-57	ENNIŞ PO	STAW TO			•	o availabi enance serv	-	
Qty Equipment #		Hrs/	Min	Hour			4 Week		
1 EXCAVATOR/4-6 METRIC TON/CRU	AWLER/DSL	8/ 43	00.00	66.67	400.00	1199.00	2830.00	2930.00	
2460340 /2/									
PMISSIONS ( PNI SIDENIES	CMICCIONO							30.77	
EMISSIONS & ENV SURCHARGE  1 EXCAVATOR/14-16 METRIC TON/		g/ 70	96 00	720 03	705 00	2025 20	E205 05		
1 EXCAVATOR/14-16 METRIC TON/0	PVHUESKI DOT .	a; /1	J. JU	150.81	/85,00	2005,00	ل.۷. لاظود	00.وودر	
7440000 CECSE 131									
EMISSIONS & ENV SURCHARGE	EMISSIONS							73.97	
1 EXCAVATOR/19-21 METRIC TON/		8/ 50	25.00	154.17	925.00	2250.00	6250.00		
2460100 cose 160	· . <del>.</del>								
EMISSIONS & ENV SURCHARGE	EMISSIONS							55.63	
1 EXCAVATOR/24-28 METRIC TON/	CRAWLER/DSL	8/ 12	75.00	212.50	1275.00	3350.00	8150.00	B150.00	
2460160 CARC 210									
EMISSIONS & ENV SURCHARGE	EMISSIONS							111 66	
1 WHEST TOWDER/3 1/SAD/GEN ER	r/bşL	S/ 7:	25.00	120.83	725.00	2100.00	5750.00	5750.00	
2610350 ¥*A9€ 72\									
EMISSIONS & ENV SURCHARGE	EMISSIONS							78.78	
1 SWEEPER/RIDE ON/3 WHEEL		8/ 3	45.00	57.50	345.00	905.00	1955,00	1855.00	
7580200									
							CONTER	TUED	
For GREAT DE	EALS on USED E	ОПЬЩЕР	T - vlsit	us on-line	at <u>www.</u> he	ntzegulp.co	m		
****	AD THE TERMS						-		
lwithstanding cayment of the LDW fee, Customer Is Cable 6 nations on the Reverse Side of this page or in violation of th				heecc caused	by the Equipme	nt being used a	operated in vidi	ation of the terms and	
RAGRAPH 12. ON THE REVERSE SIDE OF THIS PAGE II ARRANTY OF MERCHANTABILITY AND THE IMPLIED WA	S IN LIEU OF (I) ALL W.	ARRANTIES	EXPRESS	I IMPLIED OR	STATUTORY,	INCLUDING, BU	IE PART OF PE	TO, THE MAPLIED	
WAGES, INCLUDING, BUT NOT LIMITED TO, INDIRECT,	INCIDENTAL, CONSEC	MENTIALO	R SPECIAL	DAMAGES AF	RISING OUT OF	CR IN CONNE	CYCK WITH TH	IE LEASING.	
AINTENANCE, USE, OPERATION, STORAGE, ERECTION, DUIPMENT AND THAT SAME IS IN GOOD CONDITION AN									
THE EQUIPMENT, THE EQUIPMENT DESCRIBED HERE EVERSE SIDE OF THIS PAGE, CUSTOMER REPRESENTS	IN IS RENTED PURSU	ANY YO AN	D IN ACCOR						
Environmental Recovery Fee - If an Environmental F			LOSS AND	DAMAGE WA	NVER (LDW) IS	NOT INSURAN	CE. Top Charge	for LDW = 14.00 % of	
recovery by HERC to offset its expenses and costs.	including its overhea	d, for	gross rank	il charges. Cus	lomer accepts	or declines LDV	f. II Customer ab	capts LDW.In consider. a customer for loss of 9	
indling, managing, and/or disposing of weste materia	le accordated with the	a contact	or the char	EA HANDARI IA	a. Kosevi vynal	n na tama and	craditions set fo	orth in Paragraph 6, 20	
			ะจมเลีย เก	Equipment, in	RECOLDRIDE ALL	A COLO TOTO BOOK	with the same of the	DE blak Onalessar ba	
would, managing, aroror disposing of westernaterial wigment that contain hazardous substances, such a graulle fluid, as well as related administrative cost. T	s motor oll, grease, a		Reverse S acknowled	ide of Ihla paga des racelvino	and in the LOS	is and damag	iE WalVER, GUI	DE which Customer her	

Customer Signature

Carefully read the terms and conditions on reverse side of this page





PC#: 106 3412 BIENVILLE BLVD OCEAN SPRINGS, MS 39564-5732 228-872-6022

Job Site:

S.H. ANTHONY, INC.

SATURN DR

STENNIS SPACE CENTER, MS 39529

Customer: 542230 S.H. ANTHONY, INC. P.O. BOX 3719

GULFPORT, MS 39503

SUNBELT RENTALS, INC.

Salesman:

Typed By

QUOTE

Contract #.. 43360982 Contract dt. 12/06/13

Date out.... 12/06/13 12:40 PM Est return., 1/03/14 12:40 PM

Job Loc.... SATURN DR, STENNIS SPACE CENTER

Job No..... 7 - S.H. ANTHONY, IN

P.O., #..... NR

Ordered By..

NET DUE UPON RECEIPT

QTY	EQUIPMENT #		Min	Day	Week	4 Week	Amount
1.00	10,000 WATT GENERATOR 0080020		63.00	160.00	410.00	980.00	980.00
1.00	1900LB TRACK SKIDSTEER 0480510		325.00	325.00	920.00	2295.00	2295.00
1.00	PLATE TAMPER REVERSIBLE 90 0640250	OLB 24" WI	DE 135.00	280.00	700.00	1935.00	1935.00
1.00	SKIDSTEER LOADER BUCKET						N/C
SALES : Qty 1	ITEMS: Item number DLPKSRCHG TRANSPORTATION SURCHARGE	Unit EA	Price 38.000				38.00
1	ENVIRONMENTAL ENVIRONMENTAL	EA	72.940				72.94
1	RENTAL PROTECTION PLAN	EA					781.50
	DELIVERY CHARGE						200.00
	PICKUP CHARGE						

#### Rate your rental experience www.sunbeltrentals.com/survey

PROPERLY, NOTIFY THE OFFICE AT ONCE

MULTIPLE SHIFTS OR OVERTIME RATES MAY APPLY REFUELING, DAMAGES AND REPAIRS

PROBERY, NOTEY THE OFFICE AT ONCE

OVERTIME RATES MAY APPLY

REFLEXING DAMAGES AND REVARS

The lotal charges are an estimate based on the estimated rental period provided by Customer.

Customer assumes all risks associated with the Enulpment during the Rental Period, including Injury and demage to persons, property and the Equipment.

Customer is responsible for and shall only permit property trained, authorized including Injury and demage to persons, property and the Equipment.

Customer is not operate property, is not suitable for Customer's Intended use, does not have operating and safety instructions or Customer has any questions regarding use of the Equipment.

Customer shall not use the Equipment or using damaged or mailtransloring Equipment may result in serious bodily Injury or death.

Customer has received, read, understands and agrees to the estimated charges herein and all the terms and conditions of this Contract, including the Release and Indomnification provision in Section 7 and the Environmental rea in Section 14, which can also be found at www.sunbetrentias.com/rentalcontract. "Delivery/Pickup Surcharge fee explanation is evalleble at year, sunbetrentias, com/surcharges."

Lustomer plust contact Sunbet to request pickup of Equipment, retain the Pick Up Number given by Sunbetl and will be responsible for Equipment until actually retrieved by Sunbett.

For operations in California: Customer is restring equipment explainment and Air Pollution Control District rules. Under the PERP equipment and Air Pollution Control District rules. Customer is required to keep a copy of the required with the Equipment and CARB regulation certificate, including operating conditions and notification requirements, with the Equipment at all times. Customer in required to keep a copy of the regular general and

Continued on the next page...

TO: SH Anthony, Inc.

FROM: Micro-Methods, Inc.

6-Dec-13

Stennis Water Main 2 Consecutive Days

PARAMETERS		UNIT PRICE	QUANTITY	EXTENDED COST	
2 - samples pulled/2 consecutive days	\$	376.00	2	\$	752.00

This price quote does include overtime, weekends, or holidays. 24 hr. notification for scheduling sampling event required.





## **Stennis Space Center - Potable Water**

Attn:

Estimator:

Sales Person: (b)(6)

Bid Date: September 9,2013

Bid Time: 4:00 PM

Revision: 1

Plans Dated:

Addenda:

Quote Expiration Date:

#### Note:

#### Please Review Notes Below And At The Bottom Of This Quotation

- 1 This material estimate is for bidding purposes only. This is not a guaranteed list of materials, this is our interpretation of the contract documents. Customer shall verify all quantities & estimated materials prior to bidding, pricing and ordering.
- 2 This quotation is limited to material listed within, items not listed shall not be assumed as being included.
- 3 All prices are good 7 days from bid date and are based on shipments of truck load quantities.
- 4 Orders less than a truck load are subject to a price change and additional freight charges
- 5 Material order is based upon customer approval & reciept of approved submittals
- 6 All special order items may not be cancelled after order has been placed
- 7 Returned materials may be assessed a restocking/handling/freight charge
- 8 MJ DI fittings are quoted as AWWA C153 L/A (unless noted otherwise)
- 9 DI pipe, fittings & spools are quoted w/cement lining and bituminous coating (unless noted otherwise)
- 10 Pipe Drawings/Lay schedules & startup are not included in quotation, but can be provided for an additional charge
- 11 All material is quoted as F.O.B shipping point (unless noted otherwise)
- 12 All pipe will be sold in full length quantities
- 13 Per ISCO'S standard terms and conditions
- 14 Prices in effect at time of shipment

QTY	SIZE	DESCRIPTION	۷Ú	IIT PRICE		UNIT TOTAL
		Station 135+42				
1 ea		16x10 DIPS DR11 Reducing Tee Fabbed	\$	625.00	\$	625.00
1 ea		10x3 DIPS DR11 Red Tee W/3" FLNG & TING FUSED	\$	160.40	\$	160.40
1 ea		10x6 DIPS DR11 Conc Reducer	\$	168.50	\$	168.50
1 ea		6 MJ C509 RW Gate VIv, OL, Op Nut	\$	425,00	\$	425.00
2 ea		6 DIPS DR11 90 EII	\$	52.86	\$	105.72
2 ea		6 DIPS MJ Adapter DR11	\$	250.00	\$	500.00
1 ea		3 FxF C509 RW Gate VIv, OL, OP Nut	\$	335.00	\$	335.00
1 ea		3 FF Flange Accessory Pack	\$	17.50	\$	17.50
1 ea		3 x 2 1/2 Companion flange	\$	55.00	\$	55.00
1 ea		2 1/2 Sch40 PVC Male Adapter	\$	4.25		4,25
20 If		2 1/2 Sch40 PVC PE Pipe	\$	4.75	\$	95.00
1 ea	•	2 1/2 Sch40 PVC 90 Bend	\$	4.50	\$	4.50
1 ea		2 1/2 Sch40 Coupling	\$	3.25	\$	3.25
1 ea		6x12 MJ Long Sleeve C153 CL/Bit	\$	98.75	\$	98.75
2 ea		6 MJ Restraint Kit - PVC w/316ss bolts	\$	75.00	\$	150.00
2 ea		6 SS Stiffeners	\$	42.00	\$	84.00
2 ea		5 1/4x27x37 2pc HD Screw Valve Box	\$	145.00	\$	290.00
1 ea		3 roll, Detect Tape - Blue/Water	\$	30.00	\$	30.00
25 lf		12 gauge wire, Blue, Solid	\$	0.15	\$	3.75
			Estimat	ted Subtotal	\$	3,155.62
		Station 155+15				
1 ea		16x1 Service Saddle	\$	130.00	\$	130.00
200 If		1 CTS-DR9 HDPE 4710	\$	0.45	\$	90.00
1 ea		1 Corp Stop CO x CTS	\$	65.00	\$	65.00
2 ea		1 Ball Curb CTS x CTS	\$	83.95	\$	167.90
5 ea		1 SS Stiffener	\$	2.25	\$	11.25
2 ea		2 1/2x30-42 92D Curb Box	\$	55.00	\$	110.00
1 ea		3 roll, Detect-Tape - Blue/Water	-	30.00	\$	30.00
125 If		12 gauge wire, Blue, Solid	\$	0.15	\$	18.75
			Estimat	ed Subtotal	\$	622.90
					_	
		Estimated Project Total:			\$	3,778.52

Project Notes:

Page 143 redacted for the following reason:
(b)(7)(F)

National Aeronautics and Space Administration

John C. Stennis Space Center Stennis Space Center, MS 39529-6000



August 1, 2013

Reply to Attn of: RA10/13-1254DAW

Sauer Incorporated
Attn: (b)(6)
11223 Phillips Pkwy, Drive East
Jacksonville, FL 32256-1574

Subject: EMI: 11B315-01 Upgrades to Potable Water System. NASA Contract: NNS12AA95T

The following answer is in response to your Requests for Information:

#### RFI 015 Questions:

Please reference Drawing C-403 at Sta. 135+42

On Drawing C-403 at Sta. 135+42, during subsurface investigation, a 6" water main was located; however this line was not shown on the Contract Drawings.

If this line is active, a new connection will need to be installed.

This will require a FCR for the cost and additional time.

Attached C-403 Drawing with newly located water main shown.
Attached is SHA Drawing P3-03, Subsurface Location Drawing, showing the location of the newly located line?

#### Answer

The 6" line identified is the Fire Main serving Building 1022. This line is active and requires connection to the new HDPE water line. This line is believed to be C-900.

An additional 2-1/2" line is located to the east of this line. This is the potable water line serving Building 1022. This line is active and requires connection to the new HDPE water line. This line is believed to be PVC.

Both lines shall have isolation valves and valve boxes installed near the connection to the new HDPE line. Current isolation valves for each line exist near the building and at the taps to the existing main water line.

NOTE: ** "Any comment that result in a change to the contract cost, scope, or schedule you must notify the Contracting Officer for approval prior to implementation or any costs are incurred."

If you have any questions, give me a call at 228-688-1655.

Dale A. Woolridge Contracting Officer's Technical Representative

Enclosure

cc:

Jacobs-FOSC

(b)(6)
Official File



# REQUEST FOR INFORMATION

(Implemented by SOI-8040-0001-FACENG)

Request	For	Info	rm	at	ior	ı (RFI)	٨	luml	oei	•		
		,			11							

015 Water Main Installation and Tie In to Existing System

Date July 24, 2013 Requestor SAUER, INC Contract NNS12AA95T

Question:

Please reference Drawing C-403 at Sta. 135+42

On Drawing C-403 at Sta. 135+42, during subsurface investigation, a 6" water main was located, however this line was not shown on the Contract Drawings.

If this line is active, a new connection will need to be installed.

This will require a FCR for the cost and additional time.

Attached C-403 Drawing with newly located water main shown.

Attached is SHA Drawing P3-03, Subsurface Location Drawing, showing the location of the newly located line.

## Answer:

The 6" line identified is the Fire Main serving Building 1022. This line is active and requires connection to the new HDPE water line. This line is believed to be C-900,

An additional 2-1/2" line is located to the east of this line. This is the potable water line serving Building 1022. This line is active and requires connection to the new HDPE water line. This line is believed to be PVC.

Both lines shall have isolation valves and valve boxes installed near the connection to the new HDPE line. Current isolation valves for each line exist near the building and at the taps to the existing main water line.CSW

# FIELD CHANGE REQUEST (FCR) National Aeronautics and Space Administration John C. Stennis Space Center Stennis Space Center, MS 39529-6000 FCR No 042 Contractor Sauer, Inc.. Contract No. NNS12AA95T Initiator/Company Sauer, Inc. EMI No. 11B315-01 Spec./Section Drawing No. ___ 12G00-G020 Date March 4, 2014 Description of problem and recommended change: **Problem Statement:** On February, 22, 2014, while attempting to make the final connection at this location, it was determined that the field conditions are different for the original scope. The construction drawings and FCR 4 showed the final connection being made outside the security fence for building 3305. Solution: After investigation of the existing system, it was determined the shut off valve is inside the security fence area and tie in will need to occur there. Per the attached FCR, we have adjusted the final connection to Building 3305. Also, there are a number of utilities in the area that will need to be traversed to install the final connection. We recommend a specialized shoring system to complete this work. No X Yes Cost Impact Not to Exceed Schedule Impact . of Days Project Manager Date Evaluation: NASA Project Manager _____ Date _____ Construction Engineer _____ **Quality Engineer** Date _____ Safety Engineer Environmental Design Engineer Date **CCB** Chair Date _____ CCB Approved for Implementation Yes No

Contracting Officer

COTR

Date ____



11223 phillips parkway drive, east jacksonville, florida 32256

P: 904.262.6444 F: 904.268.6156

www.sauer-inc.com

March 4, 2014

National Aeronautics and Space Administration John C. Stennis Space Center Stennis Space Center, MS 39529-6000

Attn: Jason Edge, Contracting Officer

RE: NNS12AA95T, Potable Water System Upgrades, Stennis Space Center, MS; Sauer Job No. 1603

SUBJECT: FCR-42, Revised Final Connection at Building 3305 Cost Proposal

Mr. Edge,

We herein submit our formal cost proposal covering the cost to furnish, and install all work as detailed in FCR 42. On February 22, 2014, while attempting to make the final connection at this location, it was determined that the field conditions are different from the original scope. The construction drawings and FCR 4 showed the final connection being made outside the security fence for building 3305.

After investigation of the existing system, it was determined the shut off valve is inside the security fence area and tie-in will need to occur at that location. Per the attached FCR, we have adjusted the final connection to Building 3305. Also, there are a number of utilities in the area that will need to be traversed to install the final connection. We recommend a specialized shoring system to protect the existing infrastructure.

We are currently requesting a seven (7) calendar day time to complete this work since the outage will be delayed from the original date of March 8th, 2014.

If you have any questions or wish to discuss further do not hesitate to call us directly.

(b)(6)

Project Manager

PROPOSAL/ESTIMATE FOR CONT	FRACT MODIF	ICATION				3/3/2014
CONTRACT TITLE: NNS12A	A95T, Potable Wa	ater System Uj	ogrades, Stennis	s Space Cente	r, MS; Sauer Job No	o. 1603
DESCRIPTION:						
FC	R-42, Revised	Final Conn	ection at Bu	uilding 330	5 Cost Proposa	ì
	ONTRACTOR'				Revisions/Co	
1. Direct Materials						
2. Sales Tax on Materials	% of line 1					
3. Direct Labor						
37/	% of line 3					
5. Rental Equipment						
The Date of the Control of the Contr	% of line 5					
7. Equipment Ownership and Operating Exp 8. SUBTOTAL (add lines 1 - 7)	penses					
U	% of line 8				<u> </u>	
10. SUBTOTAL (Add lines 8 & 9)						
Prime Remarks:						
STIDO	NTRACTOR'S	WODK				
11. Direct Materials	NIKACIORS	WORK	0			
GAG VC N DOS N DC N	% of line 11	0.00%	0			
13. Direct Labor		0.0070	0			
14. Insurance, Taxes, and Fringe Benefits	% of line 13	0.00%	0			
15. Rental Equipment		_	0			
HE DEF	% of line 15	0.00%	0			
17. Equipment Ownership and Operating Ex	xpenses		0			
18. SUBTOTAL ( add lines 11 - 17)	10000					
	% of line 18	0.00%	0			
20. SUBTOTAL (Add lines 18 & 19)	6	2 2007	0	0		
21. Home Office Overhead	% of line 20	0.00%	0			
22. Profit 23. SUBTOTAL (Add Lines 20-22)	% of line 20	10.00%	0	21 154	SHA Total	
Sub's Remarks: SH Anthony	18	21,154	L	21,154	JOHA TOTAL	
out of terraines.		21,104				
	SUMMARY					
24. Prime Contractor's Work (from Line 10)						
25. Sub-Contractor's Work (from line 23)						
<ul><li>26. SUBTOTAL (add lines 24 &amp; 25)</li><li>27. Prime Overhead</li></ul>	% of Line 25					
28. Prime Overnead 28. Prime Profit	% of Line 25 % of Line 24					
29. Gross Receipts Tax	% of Line 24					2
30. SUBTOTAL (add lines 26 -29)	(V S.) - III. S. (V)					
31. Prime Contractor's Bond Premium	% of Line 30					
32. TOTAL COST (Add Lines 30 & 31)						
Estimated time extension and justific	ation			<u> </u>		
Please see attached cover letter.						
Prime Contractor: Sauer Incorporate	d, d/b/a Sauer	Southeast				
Subcontractor:						
					0//	4
					Date 3/4/1	4



Field Change Request - 042

Field Change Request Name - Additional Scope of Work at Final Connection to Bldg. 3305

#### Job # 1037

Total											\$ 21,157.04
Fee(15%)											\$ 2,759.61
Sub-total											\$ 18,397.43
Misc. Labor Burden 37% - Ho	ourly Pes	sonnell Only									\$ 1,434.68
Tax and Bond (5.97%)	81 855										\$ 955.63
Material Tax (9%)											\$ <b>3</b>
Base Total	\$	9,147.66	\$	840.00	\$	#	\$	6,019.47	\$	858	\$ 16,007.13
											\$ (⊕)
											\$ ( <b>2</b> )
	\$	9,147.66	\$	840.00	\$	ž.	\$	6,019.47			\$ 16,007.13
SCOPE OF WORK	SH	HA LABOR	M	ATERIAL	SUBC	ONTRACT	EC	UIPMENT	01	HER	TOTAL

DESCRIPTION: This FCR request for an additional scope of work for the installation of the final connection to building 3305. On 2/22/14 while attempting to make the connection it was determined that the field conditions had significantly changed for this scope of work. The original drawing detail and FCR 004 show the final connection to be made outside the security fence for building 3305. After further investigation of the existing system, the shut off valve is inside the security fence area, additionally there is multiple utilities that will have to be traversed to install the final connection and due to the depth and proximity to existing utilities and the asphalt driveway, a specialized shoring system will be used to protect personal and existing infrastructure.

ADDITIONAL TIME REQUESTED: 7 Days

SIGNED	BY:
(b)(6)	
Project Ma	anager

DATE:

2/27/2014



# * All Rates Match Original Cost Breakdown Sheet

	Qty of		Straight	Straight		Overtime		
Labor	Men	Hrs	Time Rate	Time	OT Hrs	Rate	Over Time	TOTAL
Sr. Project Manager	1	8	75.09	600.72		93.86	\$ -	\$ 600.72
Project Manager	1	16	51.20	819.2		64.00	\$ -	\$ 819.20
Sr. Superintendent	1	16	54.61	873.76		68.26	\$ -	\$ 873.76
Superintendent	1	40	47.10	1884		65.94	\$ -	\$ 1,884.00
Safety Manager	1	32	34.14	1092.48		42.68	\$ -	\$ 1,092.48
Quality Control			51.20	0		71.68	\$ -	\$
Operator - Equipment	2	10	15.00	300	30	22.50	\$ 1,350.00	\$ 1,650.00
Pipelayer			14.00	0		21.00	\$ -	\$ ¥
Skilled Laborer	3	10	13.50	405	30	20.25	\$ 1,822.50	\$ 2,227.50
Skilled Laborer			13.50	0		20.25	\$ -	\$
							\$ -	\$ -
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							\$ -	\$
							\$ -	\$ 2

Mgmt 5270.16 Hourly 3877.50 9147.66

Materials	Units	Qty	Unit Price	Total
8" HDPE Pipe - DR 11	LF	40	9.80	392.00
8" HDPE 90-degree fittings	EA	2	112.00	224.00
8" HDPE 45-degree fittings	EA	2	112.00	224.00
				840.00

Equipment	Units	Qty	Rate	Price	DEQ 1.5%	LDW 15%	Tax 7%	Fuel @ 4.50	Total
Kubota 121 Excavator (MINI)	Day	3	296	888	13.32	133.20	62.16	90.00	1186.68
Vacuum Jetting Rig	Day	4	400	1600	24.00	240.00	112.00	157.50	2133.50
10' x 13' Hydraulic Shoring	Week	1	671	671	10.07	100.65	46.97		828.69
Shoring delivery and pick up fee	Each	2	450	900	13.50	135.00	63.00		1111.50
Compactor	Day	1	275	275	4.13	41.25	19.25	45.00	384.63
Dewatering Equipment	Day	3	95	285	4.28	42.75	19.95	22.50	374.48
				0	0.00	0.00	0.00		0.00
				0	0.00	0.00	0.00		0.00
				0	0.00	0.00	0.00		0.00
				0	0.00	0.00	0.00		0.00
				0	0.00	0.00	0.00		0.00
				0	0.00	0.00	0.00		0.00

6019.47

From:

Sent:

Friday, February 28, 2014 8:34 AM

To:

Subject:

FW: SH Anthony

Please see below.

ISCO Industries

----Original Message----

From:

Sent: Friday, February 28, 2014 8:26 AM

To: (b)

Subject: SH Anthony

Send (b)(6) a quote

50' 8" dr 11 dips- 40' JOINTS IN STOCK TAMPA, FL SHIPS IN 20' JOINTS

\$9.80 FT BLUE STRIPE

2 - 8" dr 11 dips 90s- \$112.00 EA STOCK TAMPA, FL

2 - 8" dr 11 dips 45s- \$112.00 EA NONE IN STOCK 2 WEEKS

Regional Sales Manager ISCO Industries, LLC Crestview, FL

Www.isco-pipe.com



Quote: 32438A

Date: 2/26/2014

Time: 11:59 AM

Customer: 4467

Job Info:

S. H. ANTHONY

Stennis Space Center Miss

PO BOX 3719

GULF PORT MS, 39505

Shoring Desc: Rental quote for 8- man hole braces 10' to 13' long with 10- sheets of fin from

Salesman: 03

**Equipment Contact:** 

Rental Contact:

**Equipment Contact Phone:** 

Ext:

Rental Contact Phone: (228) 896-7310 Ext: 0

**Equipment Contact Pager:** 

Rental Contact Fax: (228) 896-7312

**Equipment Contact Mobile:** 

PO:

Delivery Fee:

\$450.00

Pickup Fee:

\$450.00

Day:

\$217.00

Freight Fee:

\$0.00

Week:

\$671.00

Material and Labor:

\$0.00

Month:

\$2,015.50

**Engineer Fee:** 

\$0.00

PLEASE NOTE:

Weight: 920

pounds

(1) Rental begins on the day the equipment is delivered and ends on the day that the customer calls the equipment off rent.

(2) Supply of equipment is based upon availability.

(3) The pickup charges are based on the assumption that the quoted equipment will be picked up all at one time. In the event of a partial pick-up, the customer will be billed based on the weight of the equipment picked-up.

(4) Equipment must be maintained by the customer while on-rent. All damage to rental equipment will be billed to the customer's

account. Cleaning fees may also be incurred.

(5) All quotes must be accepted within 30 days (of the date filled in above) and quotes are subject to confirmation to the time of the

(6) There will be no charge for engineering unless site specific engineering is necessary.

Taxes Not Included in Quote Price

Entered By: Admin



# SPEED SHORE TABULATED DATA

# MANHOLE BRACES

January 1, 1995

COPYRIGHT, U.S.A., SPEED SHORE CORPORATION, 1995 7002 Easthaven, P.O. Box 262591, Houston, Texas 77207 (713) 943-0750 U.S.A. Toll Free: (800) 231-6662 Fax: (713) 943-8483

# WARNING

# EXCAVATION PROCEDURES MAY BE VERY DANGEROUS.

- A TRAINED COMPETENT PERSON SHALL: SUPERVISE ALL EXCAVATION OPERATIONS; ENSURE THAT ALL PERSONNEL ARE WORKING IN SAFE CONDITIONS; AND HAVE THOROUGH KNOWLEDGE OF THIS TABULATED DATA. THE COMPETENT PERSON SHALL HAVE THE AUTHORITY TO STOP WORK WHEN IT IS UNSAFE FOR WORKERS TO ENTER AN EXCAVATION.
- ALL PERSONNEL SHALL BE TRAINED IN CORRECT EXCAVATION PROCEDURES, PROPER USE OF THE PROTECTIVE SYSTEM AND ALL SAFETY PRECAUTIONS.
- EXCAVATIONS AND PROTECTIVE SYSTEMS SHALL BE INSPECTED A MINIMUM OF ONCE EACH WORKING DAY AND WHENEVER THERE IS A CHANGE OF SOIL, WATER OR OTHER JOB SITE CONDITIONS.
- ALL LIFTING AND PULLING EQUIPMENT, INCLUDING CABLES, SLINGS, CHAINS, SHACKLES AND SAFETY HOOKS SHALL BE EVALUATED FOR SUITABILITY AND CAPACITY, AND SHALL BE INSPECTED FOR DAMAGE OR DEFECTS PRIOR TO USE.
- ALL INSTALLATION AND REMOVAL OF SHORING AND SHIELDING SHALL BE FROM ABOVE GROUND ONLY.
- DO NOT ALLOW PERSONNEL TO ENTER AN EXCAVATION THAT IS NOT PROPERLY SHORED, SHIELDED OR SLOPED.
- PERSONNEL SHALL ALWAYS WORK WITHIN THE SHORING AND SHIELDING. PERSONNEL SHALL NOT STAND ON THE EDGE OF AN UNSHORED EXCAVATION.
- •ALL PERSONNEL SHALL ENTER AND EXIT EXCAVATIONS ONLY WITHIN SHIELDED OR SHORED AREAS.

THIS SPEED SHORE TABULATED DATA IS A GENERAL SET OF GUIDELINES AND TABLES TO ASSIST THE COMPETENT PERSON IN SELECTING A SAFETY SYSTEM AND THE PROPER SHORING OR SHIELDING EQUIPMENT. THE COMPETENT PERSON HAS SOLE RESPONSIBILITY FOR JOB SITE SAFETY AND THE PROPER SELECTION AND INSTALLATION AND REMOVAL OF THE SHORING OR SHIELDING EQUIPMENT.

THIS TABULATED DATA IS NOT INTENDED TO BE USED AS A JOB SPECIFIC EXCAVATION SAFETY PLAN, BUT SHALL BE USED BY THE *COMPETENT PERSON* TO SUPPLEMENT HIS TRAINING, HIS EXPERIENCE AND HIS KNOWLEDGE OF THE JOB CONDITIONS AND SOIL TYPE.

January 1, 1995

# SPEED SHORE TABULATED DATA

#### 1.0 SCOPE

- 1.1 Speed Shore's Tabulated Data complies with the O.S.H.A. standards as stated in the Code of Federal Regulations 29, Part 1926, Subpart P Excavations, Section 1926.652 (c)(2). This data shall only be used by the contractor's competent person in the selection of Speed Shore Manhole Braces, spacing, size of cylinders, size of sleeves and sheeting requirements. The competent person shall be experienced and knowledgeable in trenching and excavation procedures, soil identification and in the use of Manhole Braces.
- 1.2 All personnel involved in the installation, removal or use of Manhole Braces shall be trained in their use and advised of appropriate safety procedures. All operating instructions must be followed.
- 1.3 This data is based, in whole or in part, upon requirements stated in CFR 29, Part 1926 and applicable portions of CFR 29, Part 1910. The *competent person* shall know and understand the requirements of those parts before using this data.
- 1.4 Whenever there is a variance between this Tabulated Data and CFR 29, Part 1926, Subpart P Excavations, this Tabulated Data shall take precedence. Whenever a topic or subject is not contained in this Tabulated Data, the *competent person* shall refer to CFR 29, Part 1926, Subpart P Excavations.
- 1.5 Table MHB-2 shall be used only in typical excavations with soil conditions as noted. For other soil and excavation conditions and depths, site-specific engineered designs are required. Contact Speed Shore Corporation for assistance.
- 1.6 This Tabulated Data is applicable for standard products manufactured exclusively by Speed Shore Corporation and may only be used with Speed Shore manufactured products. Any modification or repair of Speed Shore products not specifically authorized by Speed Shore Corporation voids this data.
- 1.7 This data refers to the Code of Federal Regulations, 29, Parts 1910 and 1926. In states that have their own state O.S.H.A. refer to similar regulations in the current construction rules published by the state office of Occupational Safety and Health.
- 2.0 DEFINITIONS (RE: CFR 29, Part 1926.32 Definitions) RESTATED FOR EMPHASIS.
- 2.1 1926.32 (f) "Competent Person" means one who is capable of identifying existing and predictable hazards in the surroundings or working conditions which are unsanitary, hazardous, or dangerous to employees, and who has authorization to take prompt corrective measures to eliminate them.
- 2.2 1926.32 (p) "Shall" means mandatory.

#### 3.0 SOIL CLASSIFICATIONS

- 3.1 In order to use the data presented in Table MHB-2 the soil type or types, in which the excavation is cut must first be determined by the *competent person* according to the O.S.H.A. soil classification as set forth in CFR 29, Part 1926, Subpart P, Appendix A.
- 3.2 Table MHB-2 is for soil Types A, B, C and C-60. Sec 3.3 for definition of C-60 Soil.

3.3 Type C-60 soil is a moist, cohesive soil or a dense granular soil which does not fit into Type A or Type B classifications, and is not flowing or submerged. This material can be cut with near vertical sidewalls and will stand unsupported long enough to allow the Manhole Braces to be properly installed. The *competent person* must monitor the excavation for signs of deterioration of the soil as indicated by, but not limited to, freely seeping water or flowing soil entering the excavation around or below the sheeting. An alternate design for less stable Type C soil may be required where there is evidence of deterioration.

Page 2 of 4

3.4 Water flowing into an excavation, from either above or below ground, will cause a decrease in the stability of the soil. Therefore, the *competent person* shall take action to prevent water from entering the excavation and promptly remove any water that accumulates in the excavation. Closer monitoring of the soil is required under wet conditions, particularly in the less cohesive (weaker) soil conditions. A small amount of water, or flowing conditions, may downgrade the soil classification to a less stable classification. A large amount of water, or flowing conditions, may downgrade all soils to O.S.H.A. Type C. Speed Shore shoring and shielding systems may be used safely in wet conditions when the excavation is monitored by the *competent person*. Example: When repairing a leak in utility lines, it is often difficult or even impossible, to keep water out of the excavation.

#### 4.0 PRESENTATION OF INFORMATION

- 4.1 Information is presented on tabular form in Table MHB-2. Table MHB-2 presents the maximum allowable depth that the Manhole Braces may be used in O.S.H.A. Type A, B, Type C-60 and C soils (Type C-60 soil is defined in Note 3.3).
- 4.2 Table MHB-2 is not considered adequate when loads imposed by structures or by stored material adjacent to the excavation weigh in excess of the load imposed by a 3 feet soil surcharge. The term "adjacent" as used here means the area within a horizontal distance from the edge of the excavation equal to the depth of the excavation.
- 4.3 The column, "Model" lists the leg length of the long side. For models with unequal leg lengths find the maximum depth for the longest leg.

#### 5.0 BASIS AND LIMITATIONS OF THE DATA

- 5.1 Maximum excavation depth is 25 feet.
- 5.2 The following sheeting materials, or approved equal, may be used:

Aluminum: Speed Shore's Aluminum Sheeting

Timber: 2 x 6 (S4S) Douglas Fir with a minimum bending strength (F_b) of 1,500 p.s.i. or Oak with a F_b of 850

p.s.i.

Steel: 1/2 inch or thicker Steel Plate

Plywood: 3/4 inch Finn Form

3/4 inch Omni Form

3/4 inch Combi Exterior Plywood

3/4 inch 14 Ply Arctic White Birch

3/4 inch American Plywood Association, B-B, Plyform, Class I, Exterior

3/4 inch American Plywood Association, High Density Overlay, Exterior

1 1/8 inch CDX

Two sheets of 3/4 inch CDX

- 5.3 Sheeting shall extend up to the top of the excavation and down within 2 feet of the bottom of the excavation.
- 5.4 The spacings are measured from center to center of the members.

- 5.5 The center line of the top Manhole Brace shall be a minimum of 1 foot and a maximum of 4 feet below the top of the excavation.
- 5.6 The center line of the bottom Manhole Brace shall be a maximum of 4 feet above the bottom of the excavation.
- 5.7 A minimum of 2 Manhole Brace rings are required for excavations over 6 feet deep. One Manhole Brace ring is required for excavations less than 6 feet deep.
- 5.8 The ends of each Manhole Brace leg must bear firmly against the sheeting, which must bear on firm soil or a solid and stable filler to distribute the cylinder load to the face of the excavation.
- 5.9 The faces of the excavation must be cut near vertical and straight.
- 5.10 All corners of the Manhole Braces shall be connected vertically with safety chains to adequately maintain the Manhole Braces in alignment. Safety chains shall connect the top Manhole Brace to the sheeting.

#### 6.0 INSPECTION

- 6.1 The competent person must evaluate the soils to assure the rated capacity of the Manhole Braces is not exceeded by the lateral pressure of the soil. Soils shall be evaluated in accordance with Part 3.0.
- 6.2 The competent person shall monitor all phases of the assembly, installation and use of this product to evaluate and eliminate methods which could endanger employees utilizing this product.
- 6.3 Daily inspections of the Manhole Brace and accessories must be performed by the *competent person* and deficiencies corrected.
- 6.4 Inspections shall be conducted as necessary for hazards associated with: water accumulation, changing soil conditions or changing site weather conditions.

#### 7.0 EXAMPLE TO ILLUSTRATE THE USE OF TABLE MHB-2

Problem: Design a trench safety system using a Speed Shore Manhole Brace system for a square shaft-type excavation with an opening 13 feet x 13 feet and 10 feet deep in C-60 soil (see note 3.3 for definition).

Study Table MHB-2 and read down column "Span." Select a minimum-maximum range of 11 to 14 feet so that the Manhole Brace system retains additional stroke capability past the 13 feet dimension. Read left and find a 3 inch hydraulic cylinder size and model "3-MHB-6-11". Read right under column C-60 and determine that the maximum depth for this model is 11 feet, therefore adequate for this job.

Conclusion: Model "3-MHB-6-11" is selected. Install the first Manhole Brace within 2 feet of the top of the shaft and the second Manhole Brace four feet below the top Manhole Brace. Note the bottom Manhole Brace will be four feet above the bottom of the excavation. Note 5.1 requires timber, plywood or equal sheeting. Model "3 MHB-8-11" will also shore the excavation.

# TABLE MHB-2

MODEL	CYL.	SP	AN	MAXIMUM DEPTH OF EXCAVATION (FEET)							
	DIA.				O.C. VI		3 FT. O.C. VERT.				
		FE	ET		SPACING	÷	SPACING				
	INCH	MIN.	MAX.	A&B	C-60	С	A&B	C-60	C		
2-MHB-4-5	2	5	_ 8	25	20	10	25	25	12		
2-MHB-4-6	2	6	9	25	20	10	25	25	12		
2-MHB-4-7	2	7	10	25	20	10	25	25	12		
3 MHB-6-6	3	6	9	25	25	12	25	25	16		
3 MHB-6-7	3	7	10	25	25	12	25	25	16		
3 MHB-6-8	3	_ 8	11	25	25	12	25	25	16		
3 MHB-6-9	3	9	12	19	14	7	25	20	9		
3 MHB-6-10	3	10	13	17	13	6	23	18	8		
3 MHB-6-11	3	11	14	15	11	5	21	16	7		
3 MHB-6-12	3	12	15	14	10		19	14	6		
3 MHB-6-13	3	13	16	13	9	-	17	13	5		
3 MHB-6-14	3	14	17	11	8	·	15	11	•		
3 MHB-6-15	3	15	18	9	7	-	13	10			
3 MHB-6-16	_ 3	16	19	8	6	19	12	9	-		
3 MHB-6-17	3	17	20	7	5		10	8	a		
3 MHB-8-8	3	8	11	25	25	18	25	25	20		
3 MHB-8-9	3	9	12	25	25	16	25	25	20		
3 MHB-8-10	3	10	13	25	25	14	25	25	19		
3 MHB-8-11	3	11	14	25	25	12	25	25	16		
3 MHB-8-12	3	12	15	25	23	10	25	25	. 14		
3 MHB-8-13	3	13	16	25	20	9	25	25	12		
3 MHB-8-14	3	14	17	23	17	8	2.5	23	11		
3 MHB-8-15	3	15	18	20	15	7	25	20	10		
3 MHB-8-16	3	16	19	18	13	6	24	18	8		
3 MHB-8-17	3	17	20	16	12	5	21	16	7		
3 MHB-8-18	3	18	21	14	10	-	19	14			
3 MHB-8-19	3	19	22	12	9	in	16	12			
3 MHB-8-20	3	20	23	11	8		15	11			
3 MHB-8-21	3	21	24	10	7	-	14	10	4		

(Note 1: For unequal leg lengths in rectangular Manhole Braces see explanation Note 4.3.)



# MANHOLE BRACES

## INSTALLATION PROCEDURES

# GENERAL NOTES

Manhole Braces combine the benefits of aluminum hydraulic cylinders with the ruggedness of steel box tubing. The system is designed specifically for the shoring of square and rectangular excavations. This perimeter support system provides for an unobstructed shaft and is used most often in the installation of manholes, operation of boring equipment, and placement of vaults.

# Installation Procedures

7139411003

In stable soils that will stand throughout excavation, the following procedure is appropriate:

- The contractors competent person shall monitor the excavation and construction at all times to insure that proper safety procedures are followed, and that the shoring equipment is in good condition and working properly. The competent person shall be trained in the proper use of manhole braces.
- 2. All workers shall be trained in the proper use of manhole braces and sheeting, and in excavation safety practices.
- Excavations must be dug in a neat rectangle or square with vertical walls and 90 degree corners. 3.
- The excavation must be dug to dimensions that are less than the full stroke of the hydraulic cylinders,
- No workers shall enter the excavation until the manhole rings are in place and pressurized. 5.
- The sheeting may be driven before the excavation is started, or may be placed after the excavation 6. is completed if the soil will stand long enough.
- 7. Sheeting may be wood timber, plywood, steel sheet piling, aluminum or fiberglass.
- B. The depth of the excavation may be dug before sheeting and manhole braces are placed will depend on upon how long the excavation will stand.
- 9. If the excavation face will stand the full depth bufore specting and manhole braces are placed, the sheeting is put in place and the lower manhole brace is then placed. The remaining manhole braces are placed from the bottom up.

If the excavation face will only stand for a portion of the height, excavate down four feet from the top and place sheeting four feet high. Then place a manhole brace two feet down from the top to pressurize the hydraulic cylinders. Then excavate down four more feet and repeat the procedure with manhole braces at a maximum of four feet on center.

- A minimum of two manhols braces are required to make a complete unit. 11.
- 12. There must always be sheeting at the comers of all legs of the manhole braces to distribute the load of the hydraulic to the soil. The soil must be solid behind the corners of all of the legs to insure that the hydraulic cylinders remain pressurized.



10.

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Incorporated (b)(6)

Phillips Pkay Drive

Subject: Upgrales Porable System NASA Other MA95T

DCR NNS12AA957 Disapproved.

Billidary Insufficient information provided Approved. Provide drawing proposed changes differing conditions. Management Supervision appear relative Informations. Provide comparison between requested

muting/connection approved under unstalling approved under the approvimance additional fittings.

NOTES COMMUNICATION CHARGE CONTRACT
COST SCORE SCHOOLE MUSICACTEN CONTRACTING/OFFICER
APPROX PRICE INCLEMENT TON COSTS INCLEMENT.

Tryon questions, Casey Wheeler 128,688

List, Lin Mey | || (Contracting Orficer)

illaeobs (b)(6)

Project Management Division Official

Project Management Division C. Wheeler

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Contractor	struct.	North Catel	%ÄAS&T
Initiator/Company	Satisfi		
Spec_/Section	2G00-G078	Drawing	Merch. 4,20141
Description probl	tom recommended change:		
Problem Statement:			
February, dotormined showed	wind attempting make conditions different o connection being made outsi	riginal scope.	sonstruction drawings
Solution:	Territoria de la Mariano de la	The second second	na pastale monantha
fence		rited FCR!	o inside security reperiod
connection Raild Processed install work	ling 3305 Also, there number connection. recommend	idlides specialized shorii	ig system — complete
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Project Manager			
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	reputition)	-	
COTR			
Contracting Officer			and the second

# FIELD CHANGE REQUEST (FCR) National Aeronautics and Space Administration John C. Stennis Space Center Stennis Space Center, MS 39529-6000 FCR No 042 A Contractor Sauer, Inc.. Contract No. NNS12AA95T Initiator/Company Sauer, Inc. EMI No. 11B315-01 Drawing No. C-505 Spec./Section 12G00-G020 Date 3 Description of problem and recommended change: Problem Statement: On February, 22, 2014, while attempting to make the final connection at this location, it was determined that the field conditions are different for the original scope. The construction drawings and FCR 4 showed the final connection being made outside the security fence for building 3305. Solution: After investigation of the existing system, it was determined the shut off valve is inside the security fence area and tie in will need to occur there. Per the attached FCR, we have adjusted the final connection to Building 3305. Also, there are a number of utilities in the area that will need to be traversed to install the final connection. We recommend a specialized shoring system to complete this work. Please see the attached revised pricing data and detailed drawings of the proposed change. X Yes No Not to Exceed Cost Impact . of Days Schedule Impact Project Manage DISPOSITION (NASA) **Evaluation:**

NASA Project Manager

SSC-61 (08/2013) (MS Word)

Contracting Officer

Quality Engineer Safety Engineer

Environmental

**CCB** Chair

COTR

Design Engineer

Construction Engineer

CCB Approved for Implementation Yes No

(See reverse for instructions)

Date

Date _____

Date

Date

Date

Date _____

PROPOSAL/ESTIMATE FOR CONT	RACT MODII	FICATION			3/12/2014
CONTRACT TITLE: NNS12A.	A95T, Potable W	ater System Up	grades, Stennis S	Space Center, N	IS; Sauer Job No. 1603
DESCRIPTION:					
FC	R-42, Revised	l Final Conne	ection at Buil	ding 3305 C	Cost Proposal
	ONTRACTOR				Revisions/Comments
Direct Materials	011111/101011	o working			
The state of the s	% of line 1				
3. Direct Labor	<del>(</del>				
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5. Rental Equipment	₩				
6. Sales Tax on Rental Equipment	% of line 5				
7. Equipment Ownership and Operating Exp	penses				
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9. Field Overhead- freight	% of line 8				
10. SUBTOTAL (Add lines 8 & 9)					
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11. Direct Materials	04 - 611 - 44	0.000/	0		
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18. SUBTOTAL ( add lines 11 - 17)	Apenaea		-		
187	% of line 18	0.00%	0		
20. SUBTOTAL (Add lines 18 & 19)				0	
21. Home Office Overhead	% of line 20	0.00%	0		
A CONTRACTOR OF THE PROPERTY O	% of line 20	10.00%	0		
23. SUBTOTAL (Add Lines 20-22)				18,391 SI	HA Total
Sub's Remarks: SH Anthony		18,391			
	SUMMARY				
24. Prime Contractor's Work (from Line 10)					
25. Sub-Contractor's Work (from line 23)					
26. SUBTOTAL (add lines 24 & 25)					
27. Prime Overhead	% of Line 25				
28. Prime Profit	% of Line 24				
29. Gross Receipts Tax	% of Line 26				
30. SUBTOTAL (add lines 26 -29)					
31. Prime Contractor's Bond Premium	% of Line 30				
32. TOTAL COST (Add Lines 30 & 31)					
Estimated time extension and justific	ation				
Please see attached cover letter.		70 <u>000</u> 010 V			
Prime Contractor: Sauer Incorporate	ed, d/b/a Saue	r Southeast			
Subcontractor:					
				Da	3 - 12 - 14



March 12, 2014



Sauer Inc. 11223 Phillips, Dr. East Jackson, Fla. 32256

Subject: Task Order NNS12AA95T, Potable Water System Upgrades, Stennis Space Center, MS FCR 042 Narrative Descriptions and Additional Information Requested

Roman,

Please accept this letter as SHA's narrative description for the additional scope of work required by FCR-042, which is for the final connection at station 177+67 to building 3305.

In the original SHA estimate for the project, SHA utilized the contract drawings and details of the final connections. Per the original detail (Detail 8-sheet C-505); the detail shows the final connection point located outside the fenced area surrounding building 3305, (See Attachment A). The detail also shows an 8" valve located at a tee connection to the existing valve and the average depth at the tie point approximately 4.5" to top of pipe. The 8" valve located at the existing main is also depicted on the NASA as build drawings numbers this valve as 240-PW, (See Attachment B), this valve could not be located by on site locator and after consulting with the plumbing shop in our outage meetings, it was determined that the actual location of the valve was inside the fence line at building 3305.

SHA has performed an additional subsurface investigation of the area inside the fence at building 3305 and have found numerous utilities that were not part of the original drawings, (See Attachment C). The existing line drops in elevation from 4.5' of depth to top of pipe to a depth of 9' to top of pipe at the new tie in location. This elevation change was obviously made to avoid existing underground utilities inside the fence line, however, are not shown on the Contract Drawings. SHA has located an unknown 4" PVC line, a communication duct bank, an unknown 3" galvanized line and an electrical duct bank. SHA has included these utilities in the Attached "C" drawing.

The additional scope of work to complete this final connection is as follows.

- 1. Installation of an additional 30 LF of 8" HDPE pipe.
- Installation of 3-each additional 8" 90-degree fittings.
- 3. Installation of 3-each additional 8" 45-degree fittings.
- 4. Deepen the excavation from 4.5' to 10'.
- 5. Installation and removal of a 10' x 13' hydraulic shoring system, which included 2-each 10' x 13' expandable braces and using ¾" Fin Form sheeting as the protective side and end shields.

Phone: (228) 896-7310 * Fax: (228) 896-7312
State Certified and Licensed Contractor

10145 Southpark Drive, Gulfport, MS. 39503 * P.O. Box 3719, Gulfport, MS. 39505 * Web: www.shanthonyinc.com

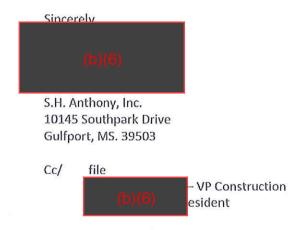
SHA will spend additional time and monies to excavate the area and with the close proximity of the existing utilities, the use of the hydraulic vacuum unit will be needed for the removal of materials from underneath the communications duct bank and the two unknown PVC/Galv., pipe. SHA will also have to purchase additional pipe and fittings to complete the installation and lastly SHA will have to install a shoring system that will allow a full opening and adjustable bracing and sheeting. The original tie in location was at a depth and site location that would have allowed sloping; therefore no shoring would have been required. The new tie in location is in close proximity to the asphalt drive, (See Attachment E). SHA is also attaching additional information for the shoring package proposed for the work, (See Attachment F).

SHA has taken into consideration the need for additional supervision and safety personnel, both who have experience in working with hydraulic vacuums and shoring.

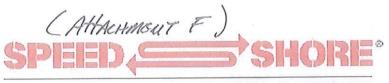
Additionally, SHA is absorbing the cost of haul off of unsuitable soils, import of additional sand and density testing.

SHA has also reviewed the original FCR 042 price estimate and adjusted the price to include credit for the original scope of work and the additional labor, materials and equipment to perform the new scope of work. SHA has reduced the cost from the original FCR Estimate, (See Attachment G).

We hope that this explains SHA's position as it pertains to this work, please contact me if you have any questions or need further information.



Pages 167 through 171 redacted for the following reasons:	
(b)(7)(F)	



# PIONEERING TRENCH SAFETY

Speed Shore Manhole Braces combine the benefits of aluminum hydraulic shoring with the ruggedness of steel box tubing in the most effective support system ever developed for shaft excavations. Specifically designed for shoring square and rectangular excavations, this perimeter support system provides for an unobstructed shaft, and is generally used to secure pits for pump stations, the installation or rehabilitation of manholes, tanks and vaults, or the operation of trenchless technology equipment.





Manhole Braces, used in conjunction with appropriate sheeting, provide the active support necessary to secure safe excavations in less stable soils. Available in a wide variety of sizes and capacities, Manhole Braces are composed of modular sections for ease of assembly and transport. Manhole Braces feature 4-way hydraulic support with high-yield telescoping steel sections, and 4-way hose bridles for simultaneous

# Additional Standard Manhole Brace Features:

- 4-Way hydraulic support with high strength, telescoping steel tubing over-sleeves.
- Non-rigid corner brackets.
- Individual legs for on site assembly and easy transportation.
- Quick connect pins and keepers.
- Flexibility to fit square or rectangular excavations.
- 4-Way hose bridal for simultaneous cylinder pressurization
- 4-corner lifting eye for installation and removal.
- HVP-2000 high volume hand pump or HP-200 electric pump.





# PIONEERING TRENCH SAFETY

# 3" MANHOLE BRACE

Notes: 1. Figures in the chart below are collapsed (retracted) leg dimensions.

2. All legs have a 3" internal cylinder with a 3' stroke.

3. "X" and "Y" in the chart below denote the collapsed length of each side.

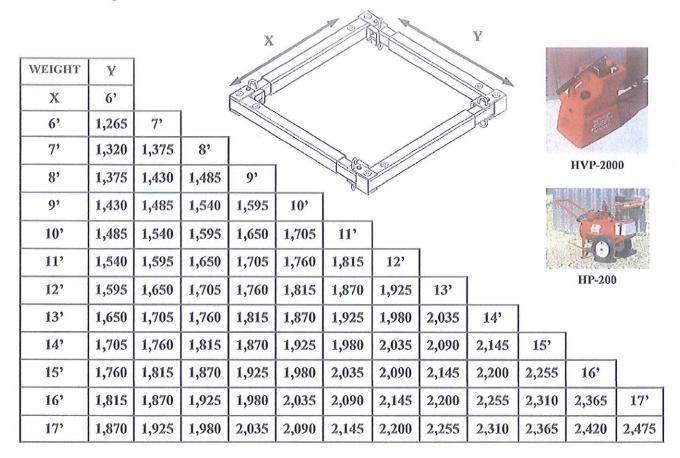
4. 3" Manhole Braces have 6" steel box tubing oversleeves.

## Example: Model Number: MHB-3-0810

A complete 8' X 10' MHB assembly comes with:

4 Legs with a maximum expansion to 11' X 13' (3' Cylinder stroke)

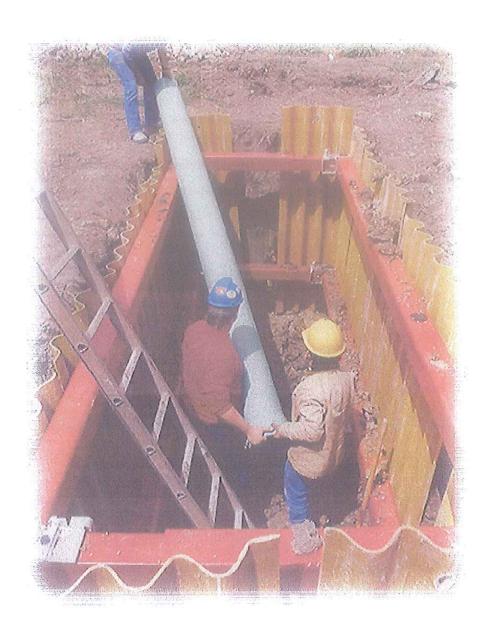
Weight is 1,595 lbs.



# Pioneer of the World's Most Advanced Trench Safety Systems













Field Change Request - 042

Field Change Request Name - Additional Scope of Work at Final Connection to Bldg. 3305

#### Job#1037

SCOPE OF WORK	S	HA LABOR	M	ATERIAL	SUBC	ONTRACT	EC	DUIPMENT	0	THER		TOTAL
	s	6,754.60	s	581.00	S	180	s	7,039.50			s	14,375.10
											S	
											S	:*
Base Total	S	6,754.60	S	581.00	S		S	7,039.50	\$	*	S	14,375 10
Material Tax (9%)											S	-
Tax and Bond (5.97%)											\$	858 19
Misc Labor Burden 37% - Ho	urly Pe	esonnell On	У								\$	759.24
Sub-total											\$	15,992.53
Fee(15%)											\$	2,398.88
Total											\$	18,391.41

DESCRIPTION: This FCR request for an additional scope of work for the installation of the final connection to building 3305. On 2/22/14 while attempting to make the connection it was determined that the field conditions had significantly changed for this scope of work. The original drawing detail and FCR 004 show the final connection to be made outside the security fence for building 3305. After further Investigation of the existing system, the shut off valve is inside the security fence area, additionally there is multiple utilities that will have to be traversed to install the final connection and due to the depth and proximity to existing utilities and the asphalt driveway, a specialized shoring system will be used to protect personal and existing infrastructure.

ADDITIONAL TIME REQUESTED: 7 Days

SIGNED BY:	(b)(6)	DATE:	2/27/2014	
(b)(6) Project Manager		DAIC.	212112014	
(h)(6)				



#### * All Rates Match Original Cost Breakdown Sheet

Labor	Qty of Men	Hrs	Straight Time Rate	Straight	OT Hrs	Overtime Rate	Over Time	TOTAL
Sr. Project Manager	1	16	75.09	1201.44	0.7.1113	93.86	\$ -	1,201.44
Project Manager	1	16	51.20	819.2		64.00	\$ -	819.20
Sr. Superintendent	1	24	54.61	1310.64		68.26	\$ -	1,310.64
Superintendent	1	32	47.10	1507.2		65.94	\$ -	1,507.20
Safety Manager	1	32	34.14	1092.48		42.68	\$ -	1,092.48
Quality Control			51.20	0		71.68	\$ -	0.00
Operator - Equipment	2	24	15.00	720	8	22.50	\$ 360.00	1,080.00
Pipelayer			14.00	0		21.00	\$ -	0.00
Skilled Laborer	3	24	13.50	972	8	20.25	\$ 486.00	1,458.00
							\$ -	0.00
Original Estimate Credit.							\$ -	0.00
Sr. Superintendent	1	-4	54.61	-218.44		68.26	\$ -	(218 44)
Superintendent	1	-8	47.10	-376.8		65.94	\$ -	(376.80)
Safety Manager	1	-8	34.14	-273.12		42.68	\$ -	(273.12)
Quality Control			51.20	0		71.68	\$ .	0.00
Operator - Equipment	2	0	15.00	0	-8	22.50	\$ (360.00)	(360.00)
Pipelayer			14.00	0		21 00	\$ .	0.00
Skilled Laborer	3	0	13,50	0	-8	20,25	\$ (486.00)	(486 00)
							\$ -	0.00
							Mgmt	4702.60

2052.00 Hourly 6754.60

Materials	Units	Qty	Unit Price	Total
8" HDPE Pipe - DR 11	LF	40	9.80	392.00
8" HDPE 90-degree fittings	EA	2	112.00	224.00
8" HDPE 45-degree fittings	EA	2	112.00	224.00
Credit for Materials				
8" HDPE Pipe - DR 11	LF	-15	9.80	(147.00)
3" HDPE 90-degree fittings	EA	-1	112.00	(112.00)
3" HDPE 45-degree fittings	EA	0	112.00	4
				581.00

Subcontractors	Units	Qty	Price	Total
				0
				- 0
				0

Equipment	Units	Qty	Rate	Price D	EQ 1.5%	LDW 15%	Tax 7%	Fuel @ 4.50	Total
CX 135 Excavator	Day	4	690	2760	41.40	414.00	193.20	90.00	3498.60
Vacuum Jetting Rig	Day	4	400	1600	24.00	240.00	112.00	157.50	2133.50
10' x 13' Hydraulic Shoring	Week	1	671	671	10.07	100.65	46.97		828.69
Shoring delivery and pick up fee	Each	2	450	900	13.50	135.00	63.00		1111.50
Compactor	Day	2	275	550	8.25	82.50	38.50	45.00	724.25
Dewatering Equipment	Day	3	95	285	4.28	42.75	19.95	22.50	374.48
Credit for Original Equipment				0	0.00	0,00	0.00		0.00
Kubota 121 Excavator (MINI)	Day	-1	296	-296	-4 44	-44 40	-20.72	-90.00	(455.56)
Vacuum Jetting Rig	Day	-1	400	-400	-6.00	-60.00	-28.00	-157.50	(651.50)
Compactor	Day	-1	275	-275	-4 13	-41 25	-19 25	-45 00	(384.63)
Dewatering Equipment	Day	-1	95	-95	-1,43	-14.25	-6.65	-22.50	(139.83)
									0.00
					-				7039 50



11223 phillips parkway drive, east jacksonville, florida 32256

P: 904.262.6444 F: 904.268.6156

www.sauer-inc.com

July 1, 2014

National Aeronautics and Space Administration John C. Stennis Space Center Stennis Space Center, MS 39529-6000

Attn: Jason Edge, Contracting Officer

RE: NNS12AA95T, Potable Water System Upgrades, Stennis Space Center, MS; Sauer Job No. 1603

SUBJECT: FCR-44, Final Connection at Building 3219 Cost Proposal

Mr. Edge,

We herein submit our formal cost proposal covering the cost to furnish, and install all work as detailed in FCR 44. During the excecution of the work we discovered that building 3219 had a two (2) inch connection that is serviced by the existing main. Per the RFI 23 response, we have priced the addition of this connection. Attached is the proposal from our subcontractor SHA and Sauer Inc. cost summary.

We are currently requesting a seven (7) calendar day time extension to complete this work.

If you have any questions or wish to discuss further do not hesitate to call us directly.

(b)(6)

Project Manager

# FIELD CHANGE REQUEST (FCR) National Aeronautics and Space Administration John C. Stennis Space Center Stennis Space Center, MS 39529-6000 FCR No 044 Contractor Sauer, Inc.. Contract No. NNS12AA95T Initiator/Company Sauer, Inc. **EMI No.** 11B315-01 Spec./Section 12G00-G020 Drawing No. Date Description of problem and recommended change:

Problem Statement: During the excecution of the work, we discovered that building 3219 had a two (2) inch connection that is being serviced by the existing main. This connection is not detailed in the construction drawings. Solution: Per the RFI 23 response, we have priced the addition of this connection. Scope of Work – Building 3219 Connection 1.) Excavate and expose the new water main at station +- 947+00 2.) Install 14" x 2" tapping saddle, with 2" brass corporation stop. Hot tap the existing main. 3.) Install 2" shut off valve no greater than 5-feet from the hot tap connection. 4.) Install approximately 500 linear feet of 2-inch HDPE pipe to building 3219 from the hot tap. 5.) Install a 2" shut off valve no greater than 5-feet from the existing building 3219 connect point. 6.) Flush new line, following all approved flushing procedures, to include, back flow protection, metering of water use and flow rate, SHA will use a third party metering company (CC Lynch). 7.)Hydrostatic test of the new line. 8.) Perform the disinfection procedures, chlorination and de-chlorination of the new line. 9.) Retrieve bacteriological samples, two consecutive days. 10.) Perform final tie in for building 3219. 11.) Remove and replace concrete as needed to make final tie in. 12.) Remove and replace section of stone driveway at building 3219 during installation process.

Cost Impact			<b>N</b> 1-11-	Exceed	(b)(4)
Schedule Impact				of Days	7
Project Manager				Date	7/1/14
		<u> </u>			
Evaluation:					
NASA Project Manage	r		Date _		
Construction Enginee	r		Date _		
Quality Engineer			Date _		
Safety Engineer			Date _		
Environmental			Date _		
Design Engineer			Date _		
CCB Chair		A DATA A A A A A A A A A A A A A A A A A	Date _		
CCB Approved for Imple	mentation Yes	s No			
COTR			Date _		
Contracting Office	er		Date _		

SSC-61 (08/2013) (MS Word) (See reverse for instructions)

PROPOSAL/ESTIMATE FOR CON	TRACT MODIF	ICATION			7/1/2014
CONTRACT TITLE: NNS12A	A95T, Potable Wa	ater System Upg	grades, Stennis	Space Center	r, MS; Sauer Job No. 1603
DESCRIPTION:					
	FCF	R-44 Building	g <b>321</b> 9 Fina	l Connecti	on
PRIME C	ONTRACTOR'				Revisions/Comments
1. Direct Materials					
2. Sales Tax on Materials	% of line 1				
3. Direct Labor					
4. Restocking fee	% of line 3				
5. Rental Equipment	0/ (# 5				
6. Sales Tax on Rental Equipment	% of line 5				
<ol> <li>Equipment Ownership and Operating Ex</li> <li>SUBTOTAL (add lines 1 - 7)</li> </ol>	penses				
9. Field Overhead	% of line 8				
10. SUBTOTAL (Add lines 8 & 9)					
Prime Remarks:					
SUBCO	NTRACTOR'S	WORK			
11. Direct Materials	Ě		0		
12. Sales Tax on Materials	% of line 11	0.00%	0		
13. Direct Labor			0		
14. Insurance, Taxes, and Fringe Benefits	% of line 13	0.00%	0		
15. Rental Equipment		0.000/	0		
	% of line 15	0.00%	0		
17. Equipment Ownership and Operating E	xpenses		0		
18. SUBTOTAL ( add lines 11 - 17) 19. Field Overhead	% of line 18	0.00%	0		
20. SUBTOTAL (Add lines 18 & 19)		0.0070	O (	0	
21. Home Office Overhead	% of line 20	0.00%	0	0	
22. Profit	% of line 20	10.00%	0		
23. SUBTOTAL (Add Lines 20-22)				26,631	SHA Total
Sub's Remarks: SH Anthony		26,631			•
	SUMMARY				
24. Prime Contractor's Work (from Line 10)					<u> </u>
25. Sub-Contractor's Work (from line 23)					
26. SUBTOTAL (add lines 24 & 25)	0/ of Line 25				
27. Prime Overhead 28. Prime Profit	% of Line 25 % of Line 24				<del></del>
29. Gross Receipts Tax	% of Line 24				
30. SUBTOTAL (add lines 26 -29)	70 OI LINO EO				
31. Prime Contractor's Bond Premium	% of Line 30				
32. TOTAL COST (Add Lines 30 & 31)					
Estimated time extension and justific	cation				
Please see attached cover letter.					
Prime Contractor: Sauer Incorporate	ed, d/b/a Sauer	Southeast			
Subcontractor:					
					Date 7-1-14
					Date , , , ,

	updated:	7/1/2014	TER SYSTEMS PROJECT				
		Field Overhead	Daily		Total		
		i iela overneau	Daily		rotai	Total	
				01100000014			
Item#	QTY	Description	Daily Rate	Allocated to	Monthly Rate	Extended Overhead	
1	1		- Dan Rote			I TOP I I I PAT	
2							
3	1						
4	0						
5	1						
6	1						
7	1						
8	1						
9	1						
10	1						
11	1						
12	1						
13	1						
14							
15	1						
16	1						
17	1.						
18	1						
1.9	1						
20	1						
21							
22							
23	1						
24	1						
otos							
lates							
		**Labor rates listed above are inclusive of labor burd					



June 30, 2014

# (b)(6)

Sauer Inc. 11223 Phillips, Dr. East Jackson, Fla. 32256

Subject:

Task Order NNS12AA95T, Potable Water System Upgrades, Stennis Space Center, MS

FCR 04# - Building 3219 Final Connection

# (b)(6)

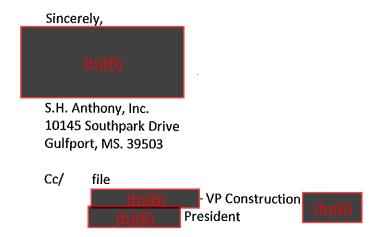
The response to RFI 023 for the connection to building requested an FCR for the work; this letter is the narrative scope for this work.

S. H. Anthony, Inc. (SHA) has reviewed the installation requirements and has included the scope of work as described below.

#### Scope of Work - Building 3219 Connection

- Excavate and expose the new water main at station +- 947+00.
- Install 14" x 2" tapping saddle, with 2" brass corporation stop.
- Hot tap the existing main.
- Install 2" shut off valve no greater than 5-feet from the hot tap connection.
- Install approximately 500 linear feet of 2-inch HDPE pipe to building 3219 from the hot tap location.
- Install a 2" shut off valve no greater than 5-feet from the existing building 3219 connection point.
- Flush new line, following all approved flushing procedures, to include, back flow protection, metering of water use and flow rate, SHA will use a third party metering company (CC Lynch).
- Hydrostatic test of the new line.
- Perform the disinfection procedures, chlorination and de-chlorination of the new line.
- Retrieve bacteriological samples, two consecutive days.
- Perform final tie in for building 3219.
- Remove and replace concrete as needed to make final tie in.
- Remove and replace section of stone driveway at building 3219 during installation process.
- Provide traffic control during installation across stone drive.
- Install erosion control measures at excavation areas.
- Install grass and maintain until accepted by the Owner.

This FCR has been derived from existing site conditions and incudes labor, materials and equipment. Please see the attached FCR breakdown for the cost. Due to material supplier quotation, this quote is valid for 30-days.





## Field Change Request - 043

# Field Change Request Name - Additional Scope of Work fro new connection at building 3219

## Job # 1037

Total											\$	26,630.94
ee(1070)		<u></u>									٠ -	3,473.60
Fee(15%)											\$	3,473.60
Sub-total											Ś	23,167,34
Misc. Labor Burden 37% - Hot	ину Ре	rsonnel Onl	У								\$	2,060.99
Tax and Bond (5.97%)											\$	1,188.50
Material Tax (9%)											\$	
Base Total	\$	7,986.80	\$	2,828.14	\$	2,355.00	\$	6,737.92	\$	-	\$	19,907.86
A					<u> </u>						\$	-
					<u> </u>						\$	*
	\$	7,986.80	\$	2,828.14	s	2,355.00	\$	6,737.92			\$	19,907.86
SCOPE OF WORK	15	IA LABOR	- N	IATERIAL	SOB	CONTRACT	F(	QUIPMENT	(	OTHER	<del> </del>	TOTAL

DESCRIPTION: This FCR request is for the installation of a new 2" HDPE water line to building 3219. The original contract drawings did not show the connection for this building. Per RFI 023, SHA is submitting this cost for the FCR change a detailed description of the scope of work required to complete this FCR per contract drawings and specifications.

ADDITIONAL TIME REQUESTED: 7 Days

SIGNED BY: DATE: 6/30/2014	was dwo na a a a a a a a a a a a a a a a a a a
<u> </u>	
Project Manager (b)(6)	
(b)(6)	



# * All Rates Match Original Cost Breakdown Sheet

···-	Qty of		Straight	Straight	1	Overtime	]	
Labor	Men	Hrs	Time Rate	Time	OT Hrs	Rate	Over Time	TOTAL
Sr. Project Manager	1	4	75.09	300.36		93.86	\$ -	300.36
Project Manager	1	20	51.20	1024		64.00	\$ -	1,024.00
Sr. Superintendent	1	20	54.61	1092.2	1	68.26	\$ -	1,092.20
Assistant Superintendent			47.10	0		65.94	\$ -	0.00
Safety Manager	1	16	34.14	546.24		42.68	\$ -	546.24
Quality Control			51.20	0		71.68	\$ -	0.00
Operator - Equipment	2	80	15.00	2400		22.50	\$ -	2,400.00
Licensed Water Operator	1	16	14.00	224	-	21.00	\$ -	224.00
Skilled Laborer	2	80	13.50	2160		20.25	\$ -	2,160.00
Truck Driver	1	16	15.00	240			\$ -	240.00
		<del></del>		<del></del>				
		1						
n saves		-+						0.00
							\$ -   Mgmt.	0.00 2416.56

Mgmt. 2416.56 Hourly 5570.24 7986.80

Materials	Units	Qty	Unit Price	Total
Tap Saddle, Pipe, Fittings	1	LS	2,106.14	2,106.14
Sodium Hypochlorite	1	LS	86.00	86.00
Sodium Bisulfite	1	LS	94.00	94.00
Concrete - 3000PSI w Fiber	2	CY	86.00	172.00
Bedding sand	74	CY	5.00	370.00
	<b>_</b>			
	1			

2,828.14

Subcontractors	Units	Qty	Price	Total
CC Lynch - Flow Testing	LS	1]	1015	1015
Micro-Methods	EA	2	275	550
Bhate Testing Lab	EA	1	540	540
Diamond Concrete	LS	1	250	250
				0

2,355.00

Equipment	Units	Qty	Rate	Price F	DEO 1.5% I	LDW 15%	Tay 704	Fuel @ 4.50	Total
KX 80 Kubota	Day	71	296	2072	31.08	310.80			
Dump Truck	Day	2	520	1040	15.60	156.00			1284.40
Loader	Day	2	638	1276	19.14	191.40		54.00	
Crew Truck	Day	7	65	455	6.83	68.25		01.00	561.93
Hydrostatic Test Pump	Day	2	123	246	3.69	36.90			303.81
Office Trailer (Rent)	Day	7	15	105					105.00
Printer	Day	7	12	84			·	· · · · · · · · · · · · · · · · · · ·	84.00
Computers (3)	Day	7	7.5	52.5					52.50
Internet (2)	Day	7	2.5	17.5					17.50
Port-O-lets (4)	Day	7	4	28					28.00
Phone Service	Day	7	2.5	17.5					17.50
		7							77.00
									-
****					1				
		Ī							

6737.92

National Aeronauti Space Administrati John C. Stennis Stennis Space Cer	ion	FIELD CHA	NGE REQUES					
0	G T		····-					
Contractor	Sauer, Inc		Contract No.	NNS12AA95T				
Initiator/Company	Sauer, Inc.		EMI No.	11B315-01				
Spec./Section	12G00-G020		Drawing No.					
			Date					
Description of probl	em and recomme	ended change:						
(2) inch connection the construction draconnection. Scope of main at station +- 94 the existing main. 3. Install approximately a 2" shut off valve now line, following a water use and flow test of the new line. new line. 9.) Retrieve building 3219. 11.) R	that is being servivings. Solution: of Work – Building 7+00 2.) Install 14 c) Install 2" shut o cy 500 linear feet o cy 500 linear feet o cy fill approved flush rate, SHA will use 8.) Perform the di ce bacteriological seemove and replace	iced by the existing report the RFI 23 responses 3219 Connection 1.) and a 2" tapping saddles for a 2" tapping saddles for a 2-inch HDPE pipe to be a third party metering sinfection procedures amples, two consections at the consection procedures amples, two consections are samples, two consections are samples.	main. This conneman, we have price on the price of the pr	orporation stop. Hot tap hot tap connection. 4.) om the hot tap. 5.) Install nnect point. 6.) Flush protection, metering of ynch). 7.)Hydrostatic and de-chlorination of the terform final tie in for e in. 12.) Remove and				
Cost Impact	☐ No 区	Yes	Not to Exceed	(b)(4)				
Schedule Impact	☐ No 🗵	1 yes //	No. of Days	7				
Project Manager	Roman Rudzik	//_//	Date	7/1/14				
DISPOSITION (NASA)								
Evaluation: Design Deficiency; Design Omission Approved 7-16-14								
NASA Project Manager			Date 7/16	/14				
Construction Engineer			Date	117				
Quality Engineer			Date	,				
Safety Engineer	(b)(d	5)	Date 7/16/	12014				
Environmental			Date 7 16	/14				
Design Engineer			Date	114				
CCB Chair	DALANA B V	handlb	Date 7//6	114				

16

Date

Date

Yes

**Contracting Officer** 

COTR

CCB Approved for implementation



11223 phillips parkway drive, east jacksonville, florida 32256

P: 904.262.6444 F: 904.268.6156

www.sauer-inc.com

July 29, 2014

National Aeronautics and Space Administration John C. Stennis Space Center Stennis Space Center, MS 39529-6000

Attn: Jason Edge, Contracting Officer

RE: NNS12AA95T, Potable Water System Upgrades, Stennis Space Center, MS; Sauer Job No. 1603

SUBJECT: FCR-46, Trent Lott Horizontal Directional Drilling

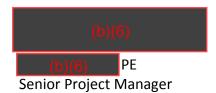
Mr. Edge,

We herein submit our formal proposal covering costs to install the 16" HDPE pipe at Trent Lott using a horizontal directional drilling (HDD) method in lieu of the jack and bore method prescribed in the plans and specifications. SH Anthony has provided credits for the original scope of work less expenses incurred during the original attempt to install using jack and bore. This includes the geotechnical investigations performed to substantiate their position.

Please note this request includes a fifteen (15) calendar day time extension to complete the work; however, no extended field overhead costs are being sought assuming we receive notice to proceed on or before August 12, 2014. If you have any questions or wish to discuss further do not hesitate to call us directly.

Sincerely,

## SAUER INCORPORATED



PROPOSAL/ESTIMATE FOR COM	ITRACT MODIFI	CATION			7/29/	/2014
CONTRACT TITLE: NNS12A	AA95T, Potable Wat	ter System Upgr	rades, Stenni	is Space Cente	r, MS; Sauer Job No. 16	03
DESCRIPTION:						
	FCR-46. T	Trent Lott Ho	orizontal [	Directional	Drilling	
PRIME (	CONTRACTOR'S		Jii Loiitai L	<del>Jii cotionai</del>	Revisions/Comme	ents
Direct Materials		VOILIT			Troviolorio, Cominic	51110
Sales Tax on Materials	% of line 1					
3. Direct Labor						
Restocking fee	% of line 3					
5. Rental Equipment						
6. Sales Tax on Rental Equipment	% of line 5					
7. Equipment Ownership and Operating E						
8. SUBTOTAL ( add lines 1 - 7)						ļ
9. Field Overhead- freight	% of line 8					ļ
10. SUBTOTAL (Add lines 8 & 9)						ļ
Prime Remarks:	•					
SUBC	ONTRACTOR'S \	WORK			1	
11. Direct Materials			0			
12. Sales Tax on Materials	% of line 11	0.00%	0			
13. Direct Labor			0			
14. Insurance, Taxes, and Fringe Benefits	% of line 13	0.00%	0			
15. Rental Equipment			0			
16. Sales Tax on Rental Equipment	% of line 15	0.00%	0			
17. Equipment Ownership and Operating	Expenses		0			
18. SUBTOTAL (add lines 11 - 17)		0.000/	0			
19. Field Overhead	% of line 18	0.00%	0	0		
20. SUBTOTAL (Add lines 18 & 19)	0/ of line 20	0.009/	0	0		
<ul><li>21. Home Office Overhead</li><li>22. Profit</li></ul>	% of line 20 % of line 20	0.00% 10.00%	0 0			
	% or line 20	10.00%	U	10 047	SHA Total	
23. SUBTOTAL (Add Lines 20-22) Sub's Remarks: SH Anthony		10,047		10,047	JOHA TOTAL	
Sub's Remarks: SH Anthony		10,047				
	SUMMARY				_	
24. Prime Contractor's Work (from Line 10	)					
25. Sub-Contractor's Work (from line 23)						
26. SUBTOTAL (add lines 24 & 25)						
27. Prime Overhead	% of Line 2					
28. Prime Profit	% of Line 2					
29. Gross Receipts Tax	% of Line 2					
30. SUBTOTAL (add lines 26 -29)						
31. Prime Contractor's Bond Premium	% of Line 3					
32. TOTAL COST (Add Lines 30 & 31)						
Estimated time extension and justifi	cation					
Please see attached cover letter.		0 4				
Prime Contractor: Sauer Incorpora Subcontractor:	ted, d/b/a Sauer	Southeast				
Signature & Title of preparer						
					Date	
	(b)(6)	PE				
S/N 0105-LF-005-6900		_				

Page 190 redacted for the following reason:

(b)(7)(F)

Page 187 redacted for the following reason:

(b)(7)(F)



July 28, 2014



Sauer Inc. 11223 Phillips, Dr. East Jackson, Fla. 32256

Subject: Task Order NNS12AA95T, Potable Water System Upgrades, Stennis Space Center, MS FCR 046 – Installation of 16" HDPE pipe via HDD vs Jack and Bore

# (b)(6)

Please accept this letter as SHA's Field Change Request for the installation of the 16" HDPE pipe at Trent Lott using the HDD method and deleting the Jack and Bore method. Per the request of the NASA – COTR, Mr. Casey Wheeler, SHA is providing a detailed plan/profile drawing of the proposed location of the HDD installation and pricing to include credits for the jack and bore, casing spacers, carrier pipe and end seals. The 30" steel casing and stainless steel casing spacers and 16" DR17 pipe are non-returnable items and therefore the unit pricing reflects installation only. Please see below for the detailed credits/additions of the scope of work. Attached is a detailed breakdown of all cost associated with this FCR. SHA is asking for a 15 day time extension for the work, with no extended overhead cost applied, which would put the contract end date to October 15, 2014. However if this FCR is not approved by August 12, 2014, SHA feels that the contract end date would be extended past the October 15, 2014 date, therefore SHA would request additional overhead day for day, until all items affected by this FCR are completed.

The total price for FCR 046 is an additional \$10,046.81

# The following list includes the credits and additional cost items per this FCR;

•	Delete 30" Jack and Bore, includes casing spacers and end seals	150 linear feet
•	Delete 16" DR17 Carrier Pipe	150 linear feet
•	Add installation of 16" DR11 Pipe HDD	150 linear feet
•	Add shoring cost from previous J&B attempt	1 lump sum
•	Add shoring delivery cost of shoring (return cost N/A)	1 lump sum
•	Add dewatering of drive pit from previous J&B attempt	1 lump sum
•	Add Mob/DE mob of dewatering equipment	1 lump sum
•	Add Mob/DE mob of HDD drill equipment	2 each
•	Add Geotechnical Report	1 lump sum

Phone: (228) 896-7310 * Fax: (228) 896-7312

State Certified and Licensed Contractor

10145 Southpark Drive, Gulfport, MS. 39503 * P.O. Box 3719, Gulfport, MS 39505 * Web: www.shanthonyinc.com

SHA has reviewed the soils report, existing site utility locations, has verified the location and depth of the utilities and the connections per the contract drawings and documents. SHA submits this proposal for review and acceptance. If any additional information is required please do not hesitate to contact me.



Project Manager S.H. Anthony, Inc. 10145 Southpark Drive Gulfport, MS. 39503

Cc/ file

VP Construction

Phone: (228) 896-7310 * Fax: (228) 896-7312



Field Change Request Name - Installation of HDD Pipe at Frent Lott in place of Jack and Bore Casing

* All Rates Match Original Cost Breakdown Sheet

Field Change Request - 046

Job # 1037

SCUPE OF WORN	SHA LABOR	MALERIAL SUBCONTRACT	SUBCO		ECOLPMEN	OTHER		TOTAL									
										Qty of	F	Straight	Straight		Overtime		
	\$ 3,194.96 \$	ě	8	4,858.50 \$			49	8,053.46		Men		Time Rate	Time	OT Hrs	Rate	Over Time	TOTAL
							65		Sr. Project Manager	-	80	75.09	600.72		93.86	. \$	600.72
				-			69	1		-	40	51.20	2048		64.00	· ·	2,048.00
Base Total	\$ 3,194.96 \$		69	4,858.50 \$		Ф	69	8,053,46	_			54.61	0		68.26	·	00.00
Material Tax (9%)							6	ı	Assistant Superintendent			47.10	0		65.94	·	00.00
Tax and Bond (5.97%)							(A)	480.79	Safety Manager	1	16	34.14	546.24		42.68		546.24
Misc. Labor Burden 37% - Hourly Pesonnell Only	ly Pesonnell Only						S	202.11	Quality Control			51.20	0		71.68	·	0.00
Sub-total							s	8,736.36	Operator - Equipment			15.00	0		22.50		0.00
Fee(15%)							69	1,310.45				14.00	0		21.00		0.00
									Skilled Laborer			13.50	0		20.25	S	0.00
Total							s	10,046,81	-			15.00	0			. 5	000
											1	00:04					0.00
DESCRIPTION: This FCR is for the installation of the 16" main at Trent Lott, original design was to install a Jack and Bore casing at this location, based on the geotechnical information per the soil boning report generated by Burns Cooley Dennis, the soil	the installation of th geotechnical informa	ne 16" main ation per the	at Trent L	ott, original g report ge	design was to	install a Jack a	and Bore ca	sing			$\frac{1}{1}$						
conditions are not suitable for a jack and bore installation. The FCR cost is based on	r a jack and bore inst	tallation. Th	ie FCR cost	is based or	n credits of jac	credits of jack and bore installation	stallation										
(UNLY) the steel casing and casing spacers are non-returnable and the material has been paid for. The pricing reflects enhancements that have not been paid for the included between	ising spacers are non	i-returnable	and the r	naterial has	been paid to	been paid for. The pricing reflects	effects										
subcontractors cost for mobilization/de-mobilization and installation of pine NDD	ization/de-mobilizati	on and inst	nem, news	nine via Hi	ie unive pit lot	ation. Also inc	naed is the										
		Sellin dina		and and and	į.												
				Š				7									
																S	0.00
ADDITIONAL TIME REQUESTED: 14 Days	ED: 14 Days															Mgmt Hourly	2648.72
									Haif Drice Credite		Ilaite	d	Daile Daile	Total			3194.96
									tack and Born Charl Caning		2 1	4 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6	-	TOTAL OUT TO			
									Control of the contro		N.W	000	10.045	100 000 001			
									Installation of Casing Spacers		EA	0					
SIGNED BY:				DATE	i	A105/2017	114		Installation of 16" HODE Corrise Box		EA	22.037	44.66	- CE OOK EG			
	THE RESIDENCE AND PARTY OF THE		-		000				thit Price Additions			200	+				
Project Manager									Well point system for reciever		DAY	5 8	400.00	\$ 2,000.00			
)									Installation of 16" HDPE via HDD		Щ	150 \$	53.53	8.029.50			
(									Shoring for drive pit from previous				0000	1			
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National Aeronau Space Administra John C. Stennis Stennis Space Ce	lion I I I I I I I I I I I I I I I I I I I
Contractor	SAUER, INC.
Initiator/Company	Sauer, Inc.
Spec./Section	12G00-G020/
Description of prob	lem and recommended change:
See attached Letter We submit our form	dated 29 July 2014. nal proposal covering cost to install t al drilling (HDD) method in lieu of the

# ANGE REQUEST (FCR)

FCR No 046 Contract No. NNS12AA95T **EMI No.** 11B<u>31</u>5-01 **Drawing No.** C-417 & C-515 **Date** 29 July 2014 e 16" HDPE pipe at Trent Lott using a jack and bore methow prescribed in the on to complete the work; however, no we receive notice to proceed on or before No Yes Cost Impact Not to Exceed X Ye Schedule Impact No f Days 15 **Project Manager** PΕ Date 29 July 2014 Evaluation: Date _____ NASA Project Manager ______ Construction Engineer Date ____ **Quality Engineer** Safety Engineer Date ____ **Environmental** Date _____ Design Engineer Date _____ Date ____ **CCB Chair** CCB Approved for Implementation Yes No COTR Date ____ **Contracting Officer** Date ____

SSC-61 (08/2013) (MS Word)

National Aeronautics and Space Administration

John C. Stennis Space Center Stennis Space Center, MS 39529-6000



August 1, 2014

Reply to Attn of: RA10/14-1417CSW

Sauer Incorporated
Attn: (b)(6)
11223 Phillips Pkwy, Drive East
Jacksonville, FL 32256-1574

Subject: EMI: 11B315-01 Upgrades to Potable Water System. NASA Task Order: NNS12AA95T

# FCR-NNS12AA95T-046 – Disapproved.

The FCR contains insufficient engineering content to evaluate the proposal as a viable alternative to requirements contained in contract documents. A complete FCR shall incorporate engineered product consistent with content contained in and developed to product the contract documents.

- Engineered revision to contract drawings, including C-401, C-417, C-515, and C-504.
- Associated revision to Contractor submitted Shop Drawings.
- Appropriate engineering design supporting data, calculations at a minimum.
- Engineered products shall be sealed by an MS PE in good standing.

Issues to resolve include items listed below.

- Location/Dimensions. The plan view of proposed re-route of the 16" main under Trent Lott Parkway at Sta 334+50 is not consistent with content contained in the supplied HDD profile. Plan appears to show a 20 ft length of pipe west of the new pipe construction. The profile shows approximately 70 ft of proposed HDD west of the new pipe shown at Sta. 96+78. A further length is expected as the profile does not show extension of the pipe to ground surface.
- Location/Preservation of existing infrastructure. Routing shown on the plan with rough dimensions shown on the profile put the re-routed HDPE surfacing at or near the pump house, B2312, and too close to a potable water supply well. Routing under B2312 and within 50 ft of the well provides unacceptable risk to existing infrastructure.
- Preserving existing pipe material/Separation of proposed HDD HDPE from existing transite and new HDPE. Any HDD must maintain a 5 ft or more separation from existing active transite pipe and a 5 ft separation is recommended from new HDPE to minimize risk of damage from drilling and pipe pulling operations.

Update connection details & appurtenances. Revisions shall address line sizes, dimensions, connection locations/details, and various appurtenances, such as sample tap assemblies and air release valves.

Preserving & operating new construction. Submit calculations and other design data as required by NASA to demonstrate that the HDD installation and HDPE pipe shall be installed to bear all critical stresses from installation and operation for the 50 year minimum design life with adequate factor of safety. Satisfactory design shall meet applicable content of AWWA MOP for PE pipe, Plastic Pipe Institute handbook of PE pipe, MDOH minimum design criteria, and NASA requirements.

NOTE: ** "ANY COMMENT(S) THAT RESULT IN A CHANGE TO THE CONTRACT COST, SCOPE, OR SCHEDULE YOU MUST NOTIFY THE CONTRACTING OFFICER FOR APPROVAL PRIOR TO IMPLEMENTATION OR ANY COSTS ARE INCURRED."

If you have any questions, give Casey Wheeler a call at 228-688-1179.

Jason Edge

Contracting Officer

cc:

Jacobs/

Project Management Division/Official File/11B315-01

Project Management Division/C. Wheeler

National Aeronau Space Administra		FIELD CHA	NGE REQUES	ST (FCR)
John C. Stennis Stennis Space Ce	Space Center enter, MS 39529-6000		FCR No	046A
Contractor	SAUER, INC.	168	Contract No.	NNS12AA95T
Initiator/Company			EMI No.	11B315-01
Spec./Section	12G00-G020/	•	Drawing No.	C-417 & C-515
			Date	15 September 2014
	esal dated 15 Septer from S. H. Anthon response to RFI 0 22C dated 27 Augu soil conditions dis pipe at Trent Lott	ember 2014. by Construction Con 22C dated 08 Septe st 2014. scovered, we submit t using a horizontal o	mber 2014 it our formal propo directional drilling	ptember 2014. osal covering cost to (HDD) method in lieu of
Cost Impact	□ No ⊠	Yes	Not to Exceed	(b)(4)
Schedule Impact	□ No ⊠	Yes	No. of Days	45
Project Manager	(b)(6)	PE (b)(6)	Date	15 September 2014
		DISPOSITION (NA	SAJ	
Evaluation:				
NASA Project Manager			Date	**************************************
Construction Engineer	ş <del></del>			
Quality Engineer				
Safety Engineer				
Environmental				
Design Engineer	AMAZON - TOTAL TOT		Date	

☐ No

**Contracting Officer** 

CCB Approved for Implementation Yes

CCB Chair

COTR

Date

Date

Date

PROPOSAL/ESTIMATE FOR CON	TRACT WODIF	ICATION			9/15/20
CONTRACT TITLE: NNS12A	A95T, Potable Wa	ter System Upg	rades, Stennis	Space Center	, MS; Sauer Job No. 1603
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Please see attached cover letter.					
Prime Contractor: Sauer Incorporate	ed, d/b/a Sauer	Southeast			
Signature & Title of preparer					Dete
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September 10, 2014

## (b)(6)

Sauer Inc. 11223 Phillips, Dr. East Jackson, Fla. 32256

Subject: Task Order NNS12AA95T, Potable Water System Upgrades, Stennis Space Center, MS FCR 046B – Installation of 16" HDPE pipe via HDD vs Jack and Bore

# (b)(6)

Please accept this letter as SHA's Field Change Request for the installation of the 16" HDPE pipe at Trent Lott using the HDD method and deleting the Jack and Bore method. Per the request of the NASA — COTR, Mr. Casey Wheeler, SHA/Sauer has provided detailed plan/profile drawing of the proposed location of the HDD installation and pricing to include credits for the jack and bore, casing spacers, carrier pipe and end seals. The 30" steel casing and stainless steel casing spacers and 16" DR17 pipe are non-returnable items and therefore the unit pricing reflects installation only. Please see below for the detailed credits/additions of the scope of work. Attached is a detailed breakdown of all cost associated with this FCR. SHA is asking for a 45 day time extension for the work, with extended overhead cost applied for 32 working days, which would put the contract end date to November 15, 2014. However if this FCR is not approved by October 1, 2014, SHA feels that the contract end date would be extended past the November 15, 2014 date, then SHA would request additional overhead day for day, until all items affected by this FCR are completed.

The total price for FCR 046 is an additional - \$181,178.76

# The following list includes the credits and additional cost items per this FCR;

0	Delete 30" Jack and Bore, includes casing spacers and end seals	150 linear feet
•	Delete 16" DR17 Carrier Pipe	150 linear feet
0	Add installation of 16" DR11 Pipe HDD	280 linear feet
0	Add shoring cost from previous J&B attempt	1 lump sum
0	Add shoring delivery cost of shoring (return cost N/A)	1 lump sum
0	Add dewatering of drive pit from previous J&B attempt	1 lump sum
0	Add Mob/DE mob of dewatering equipment	1 lump sum
0	Add Mob/DE mob of HDD drill equipment	2 each
0	Add Geotechnical Report	1 lump sum

Phone: (228) 896-7310 * Fax: (228) 896-7312
State Certified and Licensed Contractor

- Installation of 12" Hot Tap in phase 5 to flush, test, disinfect and make final connections for phase 4 and 5
   1 lump sum
- Installation of 114 additional pipe to move to the South
   Labor and Equipment
- Installation of additional dewatering and shoring to make connections at the West side of the HDD segment of the new line.

  Labor and Equipment

These items are per the cost of unit price, lump sum and labor/equipment cost. The time frame for this work is 3-weeks – 21 calendar days.

The additional time requested is to complete the following items.

- · Fusion of pipe and fittings per base contract items.
- Installation of pipe and fittings per base contract items.
- Flushing, testing and disinfection of base contract items.
- Outage for connection to 12" main at station 340+68 per base contract item.
- Final connection of Trent Lott water tower per base contract items.
- Installation of valve and ARV concrete pads per base contract items.
- Installation of flow fill for abandoned pipe from station 333+00 to 340+68
- Installation of seed and fertilizer per effected area surrounding tower.

The timeline for base contract items is +- 3.42 weeks - 24 calendar days. The total number of calendar days requested is 45-days.

SHA has reviewed the soils report, existing site utility locations, has verified the location and depth of the utilities and the connections per the contract drawings and documents. SHA submits this proposal for review and acceptance. If any additional information is required please do not hesitate to contact me.



Project Manager S.H. Anthony, Inc. 10145 Southpark Drive Gulfport, MS. 39503





# Field Change Request - 046A

Field Change Request Name - Installation of HDD Pipe at Trent Lott in place of Jack and Bore Casing

# Job # 1037

SCOPE OF WORK	SHA LABOR		MATERIAL SUBCONTRACT	EQUIPMENT	OTHER		TOTAL
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ree(15%)						69	23,632.01
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DESCRIPTION: This FCR is for the installation of the 16" main at Trent Lott, original design was to install a Jack and Bore casing at this location, based on the geotechnical information per the soil boring report generated by Burns Cooley Dennis, the soil subcontractor (MP Nexlevel) cost incurred for shoring, equipment, dewatering at the drive pit location. Also included is the conditions are not suitable for a jack and bore installation. The FCR cost is based on credits of jack and bore installation (ONLY) the steel casing and casing spacers are non-returnable and the material has been paid for. The pricing reflects subcontractors cost for mobilization/de-mobilization, and installation of pipe via HDD.

ADDITIONAL TIME REQUESTED: 45 Da SIGNED BY:

DATE:

9/10/2014

Project Manager



* All Rates Match Original Cost Breakdown Sheet

	Qty of		Straight Time	Straight		O. C.		l		
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National Aeronautics and Space Administration

John C. Stennis Space Center Stennis Space Center, MS 39529-6000



September 8, 2014

Reply to Attn of: RA10/14-1664CSW

Sauer Incorporated
Attn: (b)(6)
11223 Phillips Pkwy, Drive East
Jacksonville, FL 32256-1574

Subject: EMI: 11B315-01 Upgrades to Potable Water System. NASA Contract: NNS12AA95T

The following answer is in response to your Requests for Information:

# RFI 022C Question:

SHA proposes to relocate the water main under Trent Lott +- 144 linear feet south of the plan location as shown on C-401 and C-417. SHA proposes the change from Jack and Bored casing to HDD based on the Geotechnical Report dated 7/1/14 from Burns Cooley Dennis, LLC. (Attached Xmtl 177). The new crossing location has been relocated south to mitigate potential conflicts with the existing infrastructure per the contract drawings. SHA has provided plan and profile drawings depicting the proposed location and pipe stress calculations per the use of the Plastic Pipe Institute "Bore Aid" software, which is available for free on the <a href="https://www.ppi.org">www.ppi.org</a> website.

## Answer:

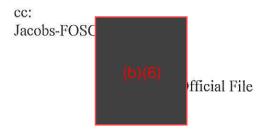
The concept is acceptable. The contractor shall submit this, along with a cost proposal, in the form of an FCR.

NOTE: ** "Any comment that result in a change to the contract cost, scope, or schedule you must notify the Contracting Officer for approval prior to implementation or any costs are incurred."

If you have any questions, give me a call at 228-688-1655.

# Original Signed by:

Casey S. Wheeler Contracting Officer's Technical Representative





# REQUEST FOR INFORMATION

(Implemented by SOI-8040-0001-FACENG)

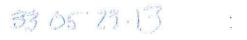
I	Stennis Space Center,	, MS 39529-6000	managarina maga		**
I	Request For Information (RI	FI) Number			
ı	022C Phase 3, Sta. 100+00	), Jack & Bore at Trent Lott			
ĺ	Date	Requestor		Contract	
I	27 August 2014	SAUER, INC		NNS12AA95T	
I	Question:				
	on drawing C-401 and C-41 Geotechnical Report dated new crossing location has b the contract drawings. SHA	ne water main under Trent Lott + - 17. SHA proposes the change from 7/1/14 from Burns Cooley Dennis, been relocated South to mitigate pothas provided plan and profile drawuse of the Plastic Pipe Institute "Bor	Jack and Bo LLC. (Attach tential confli rings depicti	ored casing to HD ned Transmittal 33 icts with the existi ng the proposed I	DD based on the 3 05 23.13-177) The ng infrastructure per location and pipe
	Reply: ASAP	Schedule Impact: YES	Cost Impa	act: YES	
				(b)(6)	
	Answer:				

SSC-781 (10/2004) Previous editions are obsolete. (MS Word 2002) C.G. (10/2004) pc

See Reverse for instructions

National Aeronautics and Space Administration

John C. Stennis Space Center Stennis Space Center, MS 39529-6000



July 31, 2014

Reply to Attn of:

RA10/14-1408CSW

Sauer Incorporated

Attn:

11223 Phillips Pkwy, Drive East Jacksonville, FL 32256-1574

Subject: EMI: 11B315-01 Upgrades to Potable Water System. NASA Contract: NNS12AA95T

The following listed contractually required submittal is being returned to your office:

Transmittal 177: Geotechnical Report Phase 3 Saturn Drive at Trent Lott Pkwy - "Receipt Acknowledged."

NOTE: ** "ANY COMMENT(S) THAT RESULT IN A CHANGE TO THE CONTRACT COST, SCOPE, OR SCHEDULE YOU MUST NOTIFY THE CONTRACTING OFFICER FOR APPROVAL PRIOR TO IMPLEMENTATION OR ANY COSTS ARE INCURRED."

If you have any questions, give me a call at 228-688-1179.

Original Signed by:

Casey S. Wheeler Contracting Officer's Representative

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Jacobs-FOSC
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icial:

12AA95T
"Receipt
CONTRACT COST, ICER FOR IRRED."

Name of Street, or other Designation of the least of the							DATE	Щ	
(	National Aeronauties and				(		08	08 July 2014	
	Space Administration  John C. Stennis Space Center Stennis Space Center, MS 39529-6000	CONTR	CONTRACTOR TRANSMITTAL SHEET					SHEET 1 OF 1	
	SECTION	SECTION I - REQUEST FOR APPROVAL (To be Initiated by the Contractor)	OR APPRO	/AL (To be	Initiated t	y the Contractor)			
	TRANSMITTAL OF SHOP DRAWINGS, EQUIPMENT DATA, MATERIAL SAMPLES, OR MANUFACTURER'S CERTIFICATES OF COMPLIANCE (See Instructions on Reverse)	OF SHOP DRAWINGS, EQUIPMENT DATA, MATERIAL MANUFACTURER'S CERTIFICATES OF COMPLIANCE (See Instructions on Reverse)	SAMPLES, OR	00 N	CONTRACT NO. NNS12AA95T	70. 15T		X NEW SUBMITTAL RESUBMITTAL	ITTAL 7AL
DT OT		FROM		PREVIOUS TE	SANSMITT	PREVIOUS TRANSMITTAL NO. (If Any)	<u>F</u>	TRANSMITTAL NO.	o'
	(b)(	Sauer Inc		N/A			177	7	ű.
SPECI	SPECIFICATION AND SECTION NO. (Cover Only One Section With Each Transmittal)	-	PROJECT TITLE AND LOCATION	LOCATION					
1260	12G00-G020/33 05 23.13 Geotechnical Report Phase 3	ort Phase 3	11B315-01 - Upgrades to the Potable Water System	rades to the F	otable \	Vater System			
NO.	DESCRIPTION OF ITEM SUBMITTED (Type, Size, Model Number, ect.) (See Instruction No. 3)	JBMITTED (er, ect.)	MANUFACTURER OF ITEM (See Instruction No. 8)	х ОF ITEM n No. 8)	NO. OF COPIES (d)	CONTRACT REFERENCE DOCUMENT DOCUMENT DRAWII PARAGRAPH NO. (f) (f)	FERENCE ENT DRAWING SHEET NO. (f)	VARIATION (See Instruction No. 6) (g)	ACTION CODE (See Instruction No. 9) (h)
я 13/2	Georgachnical Report Phase 3 Saturn Drive at Trent Lott Pwky	Drive at Trent Lott Pwky	S H Anthony		9	1.6			
5									
		1450							

I certify that the above submitted items have been reviewed in detail and are correct and in strict conformance with the contract DATE SECTION II - APPROVAL ACTION NAME, TITLE, AND SIGNATURE OF APPROVING AUTHORITY ENCLOSURES RETURNED (List by Item No.)

NO.

# AND THURING GOODEN DELINES, INC.

# GEOTECHNICAL AND MATERIALS ENGINEERING CONSULTANTS

Branch ©ffleo 14140 Dedeaux Road, Suite C Gulfport, MS 39503 Phone: (228) 832-0690 Fax: (228) 832-0930 Corporato Malling Address I Post Office Box 12828 Jackson, MS 39236

www bcdgeo.com

Gerperate Office 551 Sunnybrook Road Ridgeland, MS 39157 Phone: (601) 856-9911 Fax: (601) 856-9774

July 1, 2014

S. H. Anthony, Inc. 10145 Southpark Drive Gulfport, Mississippi 39503

Report No. 140409

Attention: Mr. Tom Rice

Geotechnical Study Stennis Potable Water Upgrades NASA Project No. NNS12AA95T Hancock County, Mississippi

Gentlemen:

Submitted here is the report of our geotechnical study for the above-captioned project, Mr. Tom Rice authorized this study through acceptance of our proposal and S. H. Anthony P.O. # 015102 dated June 12, 2014.

We appreciate the opportunity to be of service. If you should have any questions concerning this report, please do not hesitate to call us.

Very truly yours,

[3]

BURNS COOLEY DENNIS, INC.

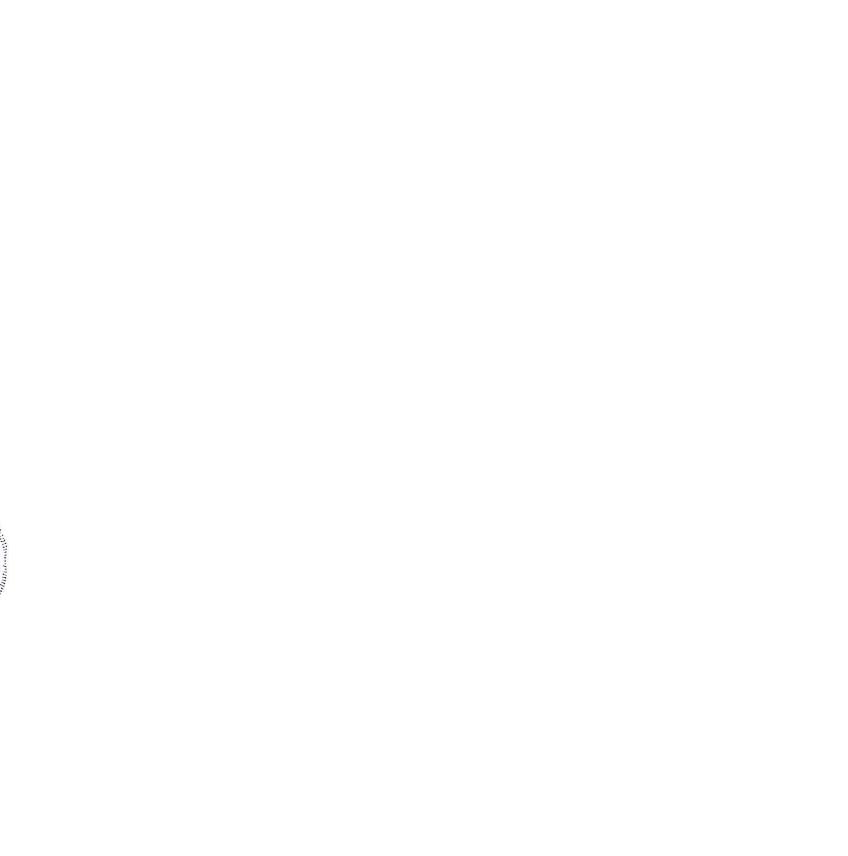
Jeffrey W. Williams P.

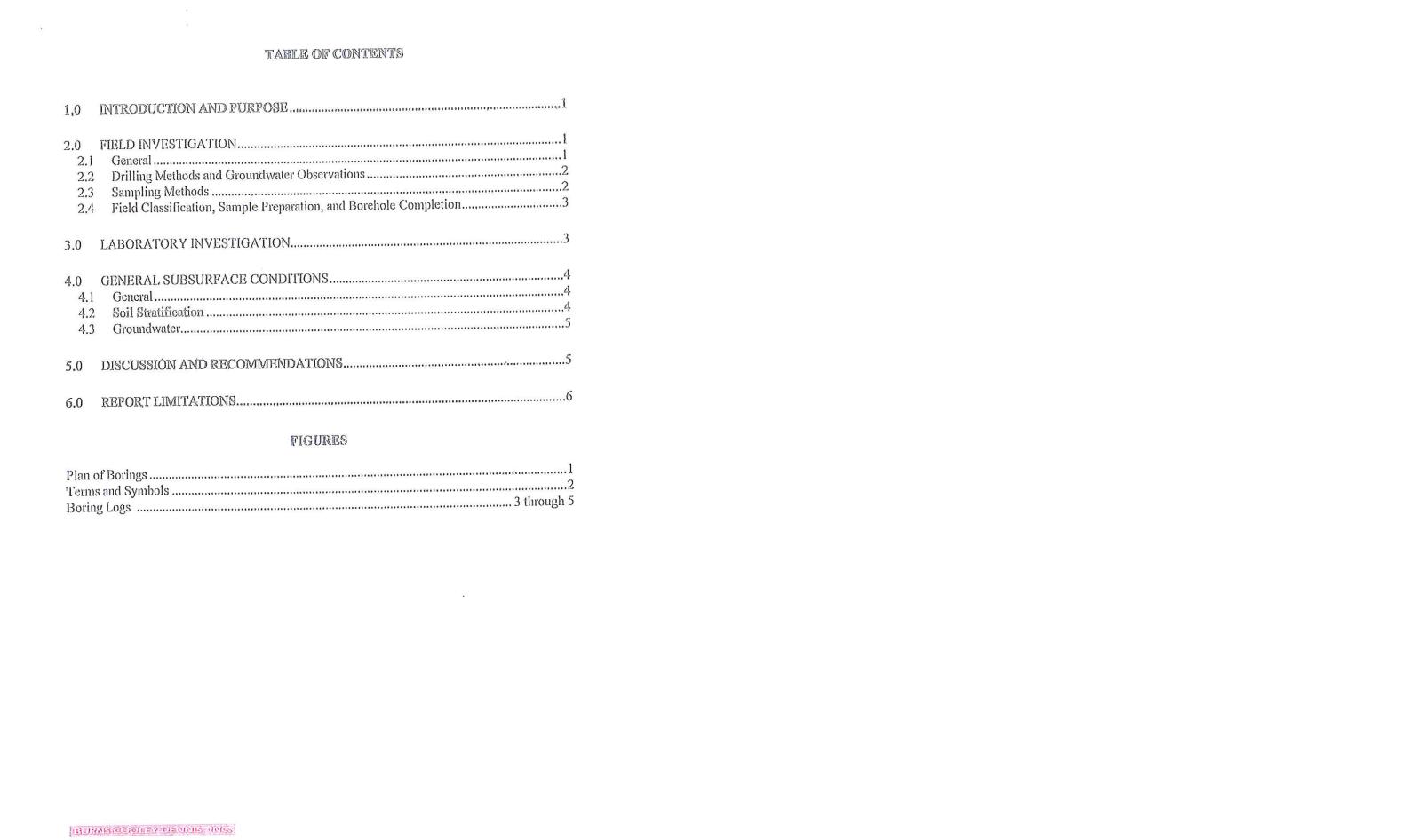
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JWW/aet/tgr Copies Submitted: (3)

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# 1.0 INTRODUCTION AND PURPOSE

We understand that S. H. Anthony, (SHA) is subcontracted to Sauer Construction for the installation of utilities for the Potable Water Upgrades project at Stennis Space Center in Hancock County, Mississippi. At the jack and bore location along Saturn Drive south of the intersection with Trent Lott Parkway, water-bearing sands were discovered during the initial efforts at the plan elevation. SHA is concerned that the soils would enter the head during the welding of the casing and could potentially cause subsidence under the roadway. The jack and bore operations will be at a depth of about 10 ft below existing grade. A 30-in. diameter steel casing will be installed so that a 16-in. diameter HDPE pipe can be placed beneath Trent Lott Parkway. We were asked to make soil borings to investigate the soil conditions at the jack and bore location.

The specific purposes of this study were:

- to explore the subsurface conditions at the jack and bore location by advancing and sampling three borings;
- 2) to verify field classifications and evaluate pertinent physical properties of the soils encountered in the borings by means of visual examination of soil samples and testing in the laboratory;
- 3) to prepare a geotechnical report summarizing the results of our study and presenting our comments on utility installation methods.

# 2.0 FIELD INVESTIGATION

# 2.1 General

Subsurface soil conditions within the jack and bore location were explored by means of three borings. The borings were made with a truck-mounted drill rig. Each boring was made to a depth of 25 ft. The boring locations were selected by S. H. Anthony personnel. The approximate locations of the borings are illustrated on Figure 1 of this report.

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All soils were classified in general accordance with the Unified Soil Classification System. A legend is shown on Figure 2, which presents a summary of the Unified Soil Classification System, and the symbols and terminology typically utilized on the graphic logs. Graphical logs of the borings are presented on Figures 3 through 5. The graphical logs illustrate the types of soil encountered with depth below the ground surface at the boring locations. The ground surface elevation at the location of the borings was not determined. Approximate GPS coordinates were recorded for Borings 1 and 3 and are presented on the boring logs.

# 2.2 Drilling Methods and Groundwater Observations

The borings were made by a truck-mounted drilling rig utilizing a 6-in, continuous-flight auger to the depth of 3 ft to 6 ft then rotary wash to completion. Observations were made continuously during dry auger drilling to detect any groundwater seepage emerging in the open boreholes. We also installed temporary piezometers at the locations of Borings 2 and 3 to record the water levels later in the day after sampling was completed. Notes pertaining to observed groundwater conditions are indicated in the lower right corner of the graphic logs.

# 2.3 Sampling Methods

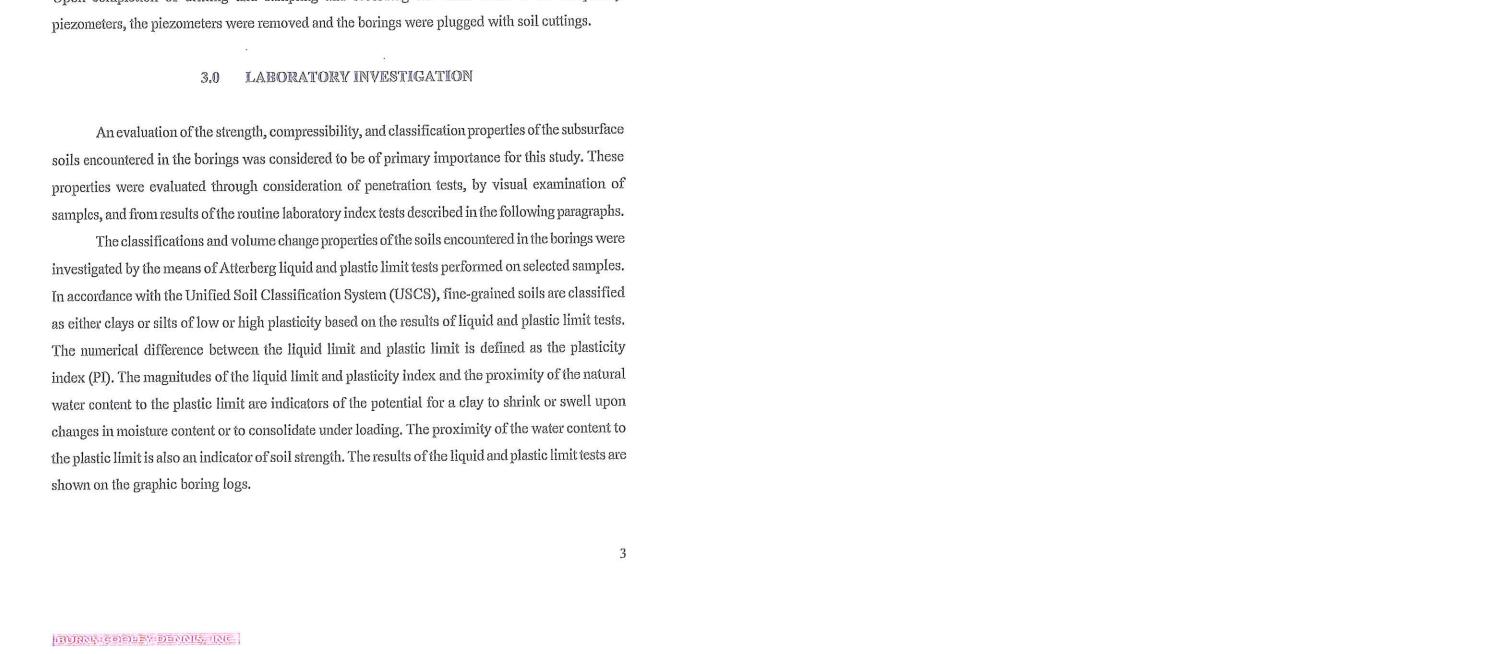
Disturbed samples of the soils were obtained at selected depths in the borings by driving a standard 2-in. OD split-spoon sampler 18 in. into the soil with a 140-lb hammer falling freely a distance of 30 inches. The standard penetration test blow counts resulting from split-spoon sampling is recorded under the "Blows Per Ft" column of the graphic logs. Split-spoon samples were obtained utilizing an automatic hammer. Automatic hammers operate more efficiently than standard safety hammers, which results in greater energy per blow. Studies indicate that SPT N-values obtained using an automatic hammer are on the order of 75 percent of N-values recorded using the older style manually-operated hammer. The N-values presented on the logs have been adjusted for this increased energy.

Relatively undisturbed samples were also obtained from selected depths in the borings by pushing a 3-in. OD thin-wall Shelby tube sampler approximately 2 ft into the soil. The actual depths

at which the split-spoon and Shelby tube samples were obtained are indicated by the appropriate symbols under the "Samples" column of the graphic boring logs.

# 2.4 Field Classification, Sample Preparation, and Borehole Completion

All soils encountered during drilling were carefully examined and classified by a geotechnical engineering technician. Representative portions of the split-spoon samples were placed in jars to provide material for later visual examination, classification, and testing in the laboratory. Unless other disposition is requested, we routinely discard soil samples after about six months of storage. Upon completion of drilling and sampling and recording the water level in the temporary piezometers, the piezometers were removed and the borings were plugged with soil cuttings.



To assist in classifying soils which include sand, tests were performed to determine the percent fines passing the No. 200 sieve. The percentage of fines resulting from each test is tabulated at the appropriate depth under the far right column of the graphic logs.

Water content tests were performed on selected samples to corroborate field classifications and to extend the usefulness of the strength, plasticity, and SPT blow count data. The results of the water content tests are shown on the graphic boring logs.

# 4.0 GENERAL SUBSURFACE CONDITIONS

# 4.1 General

A general description of subsurface soils and groundwater conditions encountered in the borings made for this study are provided in the following paragraphs. The graphical logs shown on Figures 3 through 5 should be referred to for specific soil conditions encountered at the boring locations.

# 4.2 Soil Stratification

The subsurface conditions encountered in the borings consist of alternating layers of silty sands (SM) and clays (CL, CH). The generalized soil conditions are as follows:

Approximate Depth	Soil Type		
Surface to 4.5 ft	Loose to medium dense silty sands (SM)		
4.5 ft to 10 ft	Very soft to very stiff sandy clays (CL)		
10 ft to 17 ft Note 1	Loose to medium dense silty sands (SM)		
17 ft to 25 ft	25 ft Soft to medium stiff clays (CH)		
Note 1: Encounte	red to depth of 22.5 ft in Boring 3.		

The loose to medium dense silty sands (SM) are considered to have low-moderate to moderate strength and low-moderate to low compressibility, and are nonexpansive. The very soft to medium stiff sandy clays (CL) and clays (CH) are considered to have very low to low strength and

very high to high compressibility. The stiff to very stiff sandy clays (CL) are considered to have moderate to high strength and moderate to low compressibility. The sands (SM) are nonexpansive, the sandy clays (CL) how low shrink/swell potential, and the clays (CH) have high shrink/swell potential.

# 4.3 Groundwater

Free water was initially encountered at a depth of 3 ft, 3 ft, and 5 ft in Borings 1, 2, and 3, respectively. After a brief 15-minute waiting period, the free water was observed in Borings 1, 2, and 3 at depths of 1.8 ft, 1.8 ft, and 2.3 ft, respectively. Free water was observed in the temporary piezometers installed at Borings 2 and 3 at a depth of about 1.5 ft after periods of about 6 hrs to 7 hrs. It should be noted that groundwater conditions will mainly be affected by the water levels in the adjacent channels and will also fluctuate seasonally with rainfall and surface drainage. Surficial soils can become saturated and weak to some depth during periods of prolonged and heavy rainfall.

# 5.0 DISCUSSION

Groundwater was encountered as shallow as 1.5 ft beneath the ground surface. The groundwater will have to be controlled and the side slopes of the jack and bore excavations will have to be shored. The weak water-bearing soils, especially the silty sands (SM) and the very soft to medium stiff sandy clays (CL), will have a tendency to cave in excavations and the soils in the bottom of the excavations may "heave" from hydrostatic pressures forcing groundwater up through the bottom of the excavation. The groundwater level can be lowered to reduce this potential.

We also expect that the water-bearing sands will "flow" into the open end of the pipe during jack and bore operations, which will undermine the existing road and can lead to significant settlement. We recommend that the utility installation methods utilized accommodate the presence of these weak, water-bearing soils.

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# 6.0 REPORT LIMITATIONS

The analyses, conclusions, and recommendations discussed in this report are based on conditions as they existed at the time of our field investigation and further on the assumption that the exploratory borings are representative of subsurface conditions throughout the areas investigated. It should be noted that actual subsurface conditions beyond the borings might differ from those encountered at the boring locations. If subsurface conditions are encountered during construction that vary from those discussed in this report, Burns Cooley Dennis, Inc. should be notified immediately in order that we may evaluate the effects, if any, on design and construction.

Burns Cooley Dennis, Inc. should be retained for a general review of final design drawings and specifications. It is advised that we be retained to observe construction for the project in order to help confirm that our recommendations are valid or to modify them accordingly. Burns Cooley Dennis, Inc. cannot assume responsibility or liability for the adequacy of recommendations if we do not observe construction.

This report has been prepared for the exclusive use of S. H. Anthony, Inc. for specific application to the geotechnical aspects of design and construction for the Stennis Potable Water Upgrades at Stennis Space Center in Hancock County, Mississippi. The only warranty made by us in connection with the services provided is we have used that degree of care and skill ordinarily exercised under similar conditions by reputable members of our profession practicing in the same or similar locality. No other warranty, express or implied, is made or intended.

6





Page 218 redacted for the following reason:
(b)(7)(F)

	UNI	FIED SOIL CLAS		N SYSTEM				
	Wajor Di	VISIONS	Symbol & Letter	DESCRIPTION				
(g) (g)	GRAVELS	Clean Gravels	O GW WE	ELL GRADED GRAVEL, GRAVEL-SAND MIXTURE				
COARSE-GRAINED SOILS More than half of material larger than No. 200 sieve size	More than half of coarse fraction	(Little or no fines)	PO.O. GP PC	OORLY GRADED GRAVEL, GRAVEL-SAND MIXTURE				
	larger than No. 4	Gravels with fines (Appreciable amount	BA GM SII	LTY GRAVEL, GRAVEL-AND-SILT MIXTURE				
	sieve size	of fines)	GC CI	CLAYEY GRAVEL, GRAVEL-SAND-CLAY MIXTURE				
	SANDS	Clean Sands	sw w	ell graded sand, gravelly sand				
	More than half of	(Little or no fines)	SP PC	OORLY GRADED SAND, GRAVELLY SAND				
	coarse fraction smaller than No. 4	Sands with fines	SM SI	LTY SAND, SAND SILT MIXTURE				
Moi	sieve size	(Appreciable amount of fines)	SC CI	LAYEY SAND, SAND-CLAY MIXTURES				
le.			ML SI	ILT, WITH LITTLE OR NO PLASTICITY				
FINE-GRAINED SOILS More than half of material smaller than No. 200 sieve size			ML CI	LAYÉY SILT, SILT WITH ŚLIGHT TO MEDIUM- LASTICITY				
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S SC nate ieve	OLNIO	ress man so	CL S	ILTY CLAY, LOT TO MEDIUM-PLASTICITY				
RAINED Paif of m 200 sid			CL S	ANDY CLAY, LOW TO MEDIUM-PLASTICITY (30% TO 50% SAND)				
GRA-			MH IS	BILT, FINE SANDY OR SILTY SOIL WITH HIGH-PLASTICITY				
FINE-Gi than Ro	SILTS AND CLAYS	Liquid Limit (LL) greater than 50		CLAY, HIGH-PLASTICITY				
正 ^与 与	GLAIG	greater man so	OH o	ORGANIC CLAY, MEDIUM TO HIGH-PLASTICITY				
æ	HIGHLY OR	ANIC SOILS	PT P	PEAT, HUMUS, SWAMP SOIL				
	TERMS CHARACTERIZING SO							
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PART Cobbles Gravel Sand Silt & Clay SAMPLE TY (Shown It Sample Colu	1 X Split Spoon	Auger  Dennison Barrell	GRAPH BUR HATTI	CATION, SYMBOLS AND ERMS USED ON HICAL BORING LOGS RNS COOLEY DENNIS, INC. 1402 CORINNE STREET ESBURG, MISSISSIPPI 39401 DRAWN BY: ALR CHECKED BY: BCD				



LOG OF BORING NO. 1 STENNIS POTABLE WATER UPGRADES NASA PROJECT NO. NNS12AA95T HANCOCK COUNTY, MISSISSIPPI 6" Short-flight auger to 3', TYPE: then rotary wash to completion. LOCATION: See Figure 1 POCK PEN. (TSF) 8. BLOWS PER FT V- NN % PASSING NO. 200 SIEVE DEPTH, FT DESCRIPTION OF MATERIAL PLASTIC SY LIMIT CONTENT % SURFACE EL: Loose tan and gray silty fine sand (SM) Medium stiff tan and gray sandy clay (CL) Medium dense gray silty medium sand (SM) 26.3 24 13.5 13 Soft dark gray clay (CH) with organics 20 - medium stiff with sand pockets and seams below 22' 25 30 GROUNDWATER DATA: Free water encountered at an approximate depth of 3' during auger drilling. Water level at an approximate depth of 1.8' after about 15 BORING DEPTH: 25 ft COMMENTS: **GPS Coordinates** N 30° 22' 32.5" W 89° 37' 26.2" DATE: 06/20/14 FIGURE 3 CEDEDOLINE COUNTY DENNIS, INC.

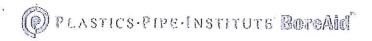
		NASA PROJEC	E WATE T NO. N	ER UF NS12	PGRAD 2AA951	ľ						
(PE; {	6" Short-flight a hen rotary was	uger to 3', h to completion.	LOCAT	ION:	See	Figure	e 1					
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	Soft tan, red, (CL)	and dark gray sandy clay	3									61.1
			23			+					÷	
	sand (SM)	o tan ana gray ony mo	15			}			j	,		45.2
Soft dark gray clay (CH) with organics and silt pockets and seams			3									121.0
	- medium stifi	below 23.5'	7				8					
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	SYMMBOL SAMPLES	SURFACE EL:  Medium dens  Soft tan, red, a (CL)  Medium dens  Soft dark gray and silt pock	STENNIS POTABL NASA PROJECT HANCOCK CO HANCOCK CO  6" Short-flight auger to 3', then rotary wash to completion.  DESCRIPTION OF MATERIAL  SURFACE EL: ±ft  Medium dense tan silty fine sand (SM)  - very stiff below 9'  Medium dense tan and gray silty fine sand (SM)  Soft dark gray clay (CH) with organics and silt pockets and seams  - medium stiff below 23.5'	STENNIS POTABLE WATE NASA PROJECT NO. N HANCOCK COUNTY, N HANCOCK	STENNIS POTABLE WATER UE NASA PROJECT NO. NNS12 HANCOCK COUNTY, MISSI  6" Short-filight auger to 3", then rotary wash to completion.  DESCRIPTION OF MATERIAL  SURFACE EL: ±ft  Medium dense tan silfy fine sand (SM)  16  Soft tan, red, and dark gray sandy clay (CL)  - very stiff below 9'  23  Medium dense tan and gray silfy fine sand (SM)  15  Soft dark gray clay (CH) with organics and silt pockets and seams  3  - medium stiff below 23.5'  7  DEPTH: 25 ft  COMMENTS:  Grain  Gray  Gra	STENNIS POTABLE WATER UPGRAT NASA PROJECT NO. NNS12AA951 HANCOCK COUNTY, MISSISSIPP  6" Short-flight auger to 3", then rotary wash to completion.  LOCATION: See    Control   Co	STENNIS POTABLE WATER UPGRADES NASA PROJECT NO. NNS12AA95T HANCOCK COUNTY, MISSISSIPPI  6" Short-flight auger to 3', then rotary wash to completion.  DESCRIPTION OF MATERIAL  SURFACE EL:  ### Medium dense tan silty fine sand (SM)  Soft tan, red, and dark gray sandy clay (CL)  Soft dark gray clay (CH) with organics and silt pockets and seams  3  DEPTH: 25 ft COMMENTS:  GROUNDWATE lan pproximate of language to 3', GROUNDWATE lan proximate of language to 3', GROUNDWATE language to 3'	STENNIS POTABLE WATER UPGRADES NASA PROJECT NO. NNS12AA95T HANCOCK COUNTY, MISSISSIPPI  6" Short-flight auger to 3", then rotary wash to completion.  LOCATION: See Figure 1  2 PLASTIC COUNTY SURFACE EL: #R Medium dense tan silty fine sand (SM)  Soft tan, red, and dark gray sandy clay (CL)  Soft dark gray clay (CH) with organics and silt pockets and seams  3  - medium stiff below 23.5'  7  GROUNDWATER DATA: an approximate depth of level at a per level at an approximate depth of level at an approximate depth of level at an approximate depth of level at a le	STEINIS POTABLE WATER UPGRADES NASA PROJECT NO. NNS12AA95T HANCOCK COUNTY, MISSISSIPPI  6" Short-flight auger to 3", then rotary wash to completion.  DESCRIPTION OF MATERIAL  SURFACE EL: ±ft  Medium dense tan silty fine sand (SM)  16  Soft tan, red, and dark gray sandy clay (CL)  Soft tan, red, and dark gray sandy clay and (SM)  15  Soft dark gray clay (CH) with organics and silt pockets and seams  3  PHASTIC WATER UNITS  WATER UNITS  PHASTIC WATER  WATER  UNITS  PHASTIC  UNITS  P	STENNIS POTABLE WATER UPGRADES NASA PROJECT NO. MISSISSIPPI  6" Short-flight auger to 3", then rotary wash to completion.  LOCATION:  Sea Figure 1  DESCRIPTION OF MATERIAL.  SURFACE EL: #ft  Wedium dense tan silty fine sand (SM)  16  Soft tan, red, and dark gray sandy clay (CL)  Wedium dense tan and gray silty fine sand (SM)  Medium dense tan and gray silty fine sand (SM)  Figure 1  PLASTIC Contents  WATER WATER WATER WATER 10  O-UC Cobasion, kipping fine in the standard of the standard standard in the standard standar	STENNIS POTABLE WATER UPGRADES NASA PROJECT NO, NMS12AA95T HANCOCK COUNTY, MISSISSIPPI  6"Short-filight auger to 3', then rotary wash to completion.  DESCRIPTION OF MATERIAL  SURFACE EL: sift  Wedium dense tan silty fine sand (SM)  Soft tan, red, and dark gray sandy clay  (CL)  Soft dark gray clay (CH) with organics and silty prockets and seams  3  Soft dark gray clay (CH) with organics and silty prockets and seams  3  GROUNDWATER DATA: Free water encouse and approximate depth of 3' during auger dillipse served in a supproximate depth of 3' during auger dillipse served in 3' and silt pockets and seams  GROUNDWATER DATA: Free water encouse and approximate depth of 3' during auger dillipse served in a supproximate depth of 3' during auger dillipse served in a supproximate depth of 3' during auger dillipse served in a supproximate depth of 3' during auger dillipse served in a supproximate depth of 3' during auger dillipse served in a supproximate depth of 3' during auger dillipse served in a supproximate depth of 3' during auger dillipse served in a supproximate depth of 3' during auger dillipse served in a supproximate depth of 3' during auger dillipse served in a supproximate depth of 3' during auger dillipse served in a supproximate depth of 3' during auger dillipse served in a supproximate depth of 3' during auger dillipse served in a supproximate depth of 3' during auger dillipse served in a supproximate depth of 3' during auger dillipse served in a supproximate depth of 3' during auger dillipse served in a supproximate depth of 3' during auger dillipse served in a supproximate depth of 3' during auger dillipse served in a supproximate depth of 3' during auger dillipse served in a supproximate depth of 3' during auger dillipse served in a supproximate depth of 3' during auger dillipse served in a supproximate depth of 3' during auger dillipse served in a supproximate depth of 3' during auger dillipse served in a supproximate and a sup	STEININS POTABLE WATER UPGRADES NASA PROJECT NO. NINST2ABST HANCOCK COUNTY, MISSISSIPPI  6" Short-filight auger to 3", then rotary wash to completion.  LOCATION: See Figure 1  DESCRIPTION OF MATERIAL.  SURFACE EL: ±ft  Medium dense tan silty fine sand (SM)  16  CLC  PLASTIC OVER CONSISTING WATER LIGHT  PLASTIC OVER USED  PLASTIC OVER USED  PLASTIC OVER USED  PLASTIC OVER USED  VALER USED  PLASTIC OVER USED  VALER USED  VALER USED  PLASTIC OVER USED  VALER USED  VALER USED  VALER USED  PLASTIC OVER USED  VALER USED  V

### LOG OF BORING NO. 3 STENNIS POTABLE WATER UPGRADES NASA PROJECT NO. NNS12AA95T HANCOCK COUNTY, MISSISSIPPI

6" Short-flight auger to 6', then rotary wash to completion. LOCATION: See Figure 1 Cohesion, kips/sq ft V- NN DEPTH, FT SYMBOL DESCRIPTION OF MATERIAL PLASTIC WATER LIQUID LIMIT CONTENT % LIMIT % o --C--SURFACE EL: Medium dense tan and gray silty fine sand (SM) with trace of gravel and organics 13 27.3 Very soft tan and red sandy clay (CL) - stiff below 8' 1.75 55.7 Loose light gray silty medium sand (SM) 8 15 - with trace of wood fragments below 19' 156.4 5 20 Soft dark gray clay (CH) with sand pockets and seams 25 30 COMMENTS: GPS Coordinates BORING DEPTH: 25 ft GROUNDWATER DATA: Free water encountered at an approximate depth of 5' during auger drilling. Water level at an approximate depth of 2.3' after about 15 N 30° 22' 32.2" W 89° 37' 27.7" minutes and 1.5' after 24 hours. DATE: 06/20/14

CONTROL OF THE PROPERTY OF THE





105 Decker Court, Suite 825 Irving, TX, 75062 Website http://plasticpipe Email info@plasticpipe.

# Préduct Pipe

Pipe Type: Pipe Application: HDPE-PE4710 M&I - Pressure Pipe

Pipe Classification: Ductile Iron Pipe Size (DIPS)

Pipe Nominal Diameter: 16 in Pipe Dimension Ratio: 11

## **Bore Construction Inputs**

Project Length:

250 ft

Pipe Entry Angle: Pipe Exit Angle:

10 degrees 12 degrees

Depth of Cover:

10 ft

Extra Length of Pipe:

Depth to Water Table: 2 ft 50 ft

### Bore Construction Calculated Values

Length to Reach Depth of Cover: Length Traversed at Depth:

114.6 ft 39.9 ft

Length to Rise from Depth:

95.5 ft

Bending Radius, Pipe Entry: Bending Radius, Pipe Exit:

656.6 ft 455.9 ft

## Site Stratigraphy

Soil Layer 1 Type: Layer 1 Thickness: Silty-Sand

Soil Layer 2 Type:

50 ft Silty-Sand

This my design and material naramaters are assumed in these calculations based upon successed values from http://ppi.borezid.com for a complete list of values,

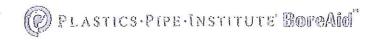
#### Calculation Procedure Assumptions

- The earth pressure coefficient used in the calculations is based upon Stein's theory.
- The operational critical collapse calculation displays the result for a water filled pipe (i.e., pressure pipe) and gravity-sewer).
- Operational compressive wall stress and buoyant deflection during installation are not shown.
- o 3/4 of the maximum calculated tensile stress is used in the installation critical collapse calculation since the encountered past three-quarters of the bore distance.
- Entry and exit elevations are assumed equal and additional loads due to variation in topography are not cor
- The silo width is assumed equal to the bore diameter for calculation of the arching factor during determination
- The 1-hr installation critical collapse pressure includes the drag pressure but the 10-hr calculation does not.
- For bores in lithified rock, the earth pressure and deflection is not calculated but an ovality deflection of 3%
- These are preliminary calculations only. Qualified professionals should be contracted to consider all aspects directional drilling.

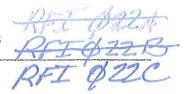
For more Information contact suggest (hope) hope in the suggest of the contact suggests (suggests that the contact suggests in 
Note: This analysis was downloaded from the PPI-BoreAid website and is for general information only. This info warranty, expressed or implied, and is not a substitute for competent professional assistance as required by local making use of this information, does so at his or her own risk and assumes any resulting liability.



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RFI ØZZA RFI ØZZB RFI ØZZC			
1.45.0a £1962 : sea			
d empty pipe (i.e., conduit,			
maximum depih is typically not			
nsidered (topography is flat). ion of the earth pressure.			
is assumed for collapse calculations, is of the design for horizontal			
ormation is offered without any al and national authorities. Anyone			
Copyright 2010 eTrenchless Group Inc.			



105 Decker Court, Suite 825 Irving, TX, 75062 Website http://plasticpipe.org Email info@plasticpipe.org



# Calculated Design Values

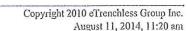
HDPE-F	DPE-PE4710 OPERATIONAL		INSTALLATION					
DIPS Nom. OD	DIPS DR	Deflection	Collapse - Full (pressure pipe)	Critical Collapse 1-hr	Critical Collapse 10-hr	Pullback Force	Allowable Pullback	Status
inches		% OD	psi	psi	psi	lbs	lbs	
16	9	0.4	128	284	236	10,712	122,123	PASS
16	11	0.8	66	145	121	11,042	102,190	PASS
16	13.5	1.6	34	74	62	11,329	84,807	PASS
16	9	0.4	128	285	238	9,740	122,123	PASS
16	11	0.8	66	146	121	10,229	102,190	PASS
16	13.5	1.6	34	74	62	10,655	84,807	PASS
16	9	0.4	128	287	239	4,605	122,123	PASS
16	11	0.8	66	147	122	4,546	102,190	PASS
16	13.5	1.6	34	75	63	4,495	84,807	PASS

# Calculated Factors of Safety

HDPE-F	PE4710	OP	ERATIONAL		INSTALLATION	NO		
DIPS Nom. OD	DIPS DR -	Deflection	Collapse - Full (pressure pipe)	Critical Collapse 1-hr	Critical Collapse 10-hr	Pullback Allowable Force Pullback		Status
inches		% OD						
16	9	0.4	59.1	17.2	36.4	PASS	-	PASS
16	11	0.8	30.3	8.8	18.6	PASS	•	PASS
16	13.5	1.6	15.5	4.5	9.5	PASS		PASS
16	9	0.4	59.1	17.3	36.6	PASS	- 1	PASS
16	11	0.8	30.3	8.8	18.7	PASS	- ·	PASS
16	13.5	1.6	15,5	4.5	9,5	PASS	9-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1	PASS
16	9	0.4	59.1	23.6	110.3	PASS		PASS
16	11	0.8	30.3	12.1	56.4	PASS	•	PASS
16	13,5	1.6	15.5	6.2	28.9	PASS	-	PASS

Note: This analysis was downloaded from the PPI-BoreAid website and is for general information only. This information is offered without any warranty, expressed or implied, and is not a substitute for competent professional assistance as required by local and national authorities. Anyone making use of this information, does so at his or her own risk and assumes any resulting liability.

Powered by Boyeaia"



Pages 225 through 231 redacted for the following reasons:

(b)(6) (b)(7)(F)

National Aeronau Space Administra		FIEL	D CHANGE RE	QUES	FI (FCR)
John C, Stennis Stennis Space Co	Space Center enter, MS 39529-6000		F	CR No	046A
Contractor	SAUER, INC.		Contra	act No.	NNS12AA95T
Initiator/Company			- E	MI No.	11B315-01
Spec./Section	12G00-G020/		_ Drawi	ng No.	C-417 & C-515
			<del>-</del> 2		15 September 2014
	osal dated 15 Se from S. H. Antl response to R 22C dated 27 Au soil conditions pipe at Trent I	eptember 2014. hony Construct FI 022C dated 0 ugust 2014. s discovered, w Lott using a hor	ion Company date 8 September 2014 e submit our forma izontal directional	al propo drilling	ptember 2014. osal covering cost to (HDD) method in lieu of
Cost Impact	☐ No	Yes	Not to	Exceed	(b)(4)
Schedule Impact	☐ No		No	of Days	45
Project Manager		PE	(b)(6)	Date	15 September 2014
Evaluation:		D			
NASA Project Manager	1		Date		
Construction Engineer					
Quality Engineer					
Safety Engineer	-				
Environmental	-				
Design Engineer	wax				
CCB Chair			Date		

☐ No

Date

Date

Yes

**Contracting Officer** 

COTR

CCB Approved for Implementation

National Aeronaut Space Administral	10,1	ELD CHANGE REQUES	T (FCR)
John C, Stennis S Stennis Space Cer	Space Center nter, MS 39529-6000	FCR No	047
Contractor	SAUER, INC.	Contract No.	NNS12AA95T
Initiator/Company	S H Anthony	EMI No.	11B315-01
Spec./Section	12G00-G020/33 11 00	Drawing No.	·
			30 September 2014
Description of probl	em and recommended cha		
	Station 916+00 (Phase 5)		
attached S. H. Antho	ony Letter dated 30 Sept. 20	•	
A custom connection pipe on the other en	n has been ordered that wil d.	II fit the 12" HDEP Pipe on or	e end and the oval A-C
Please see the attacl	ned Product Data, Drawing	, S/N 0105-LF005-6900 with b	ack-up.
Cost Impact	□ No	xceed	(b)(4)
Schedule Impact	⊠ No □	f Days	0
Project Manager		(b)(6) Date	30 September 2014
Evaluation:			
Approved by	<b>y</b>	Conditions; Field Fit	
NASA Project Manager	1	Date 10/1	714
Construction Engineer		Date 10/1/	1
Quality Engineer		Date /0///	14
Safety Engineer		Date	
Environmental -		Date 10-1-	14
Design Engineer		Date /8/1/	14
CCB Chair	Karna K. Smyder	Date <u>/0///</u> /	4
CCB Approved for Implemen	ntation X Yes  No		
COTR	Castle	Date 10	1/14
Contracting Officer		Date	



September 30, 2014

(b)(6)

Sauer Inc. 11223 Phillips, Dr. East Jackson, Fla. 32256

Subject:

Task Order NNS12AA95T, Potable Water System Upgrades, Stennis Space Center, MS

FCR 047 - Installation of Custom Built Coupling - Station 916+00 - Phase 5

(b)(6)

This FCR is for the installation of a custom fabricated transition coupling at the final connection located at station 916+00 in phase 5. The existing asbestos concrete pipe has an OD outside the range of all nominal transition coupling sizes. SHA mad an attempt to connect using the approved submitted coupling. This coupling would not fit the OD of the existing A/C pipe. In an attempt a JCM - Extended range coupling and a Romac Industries, extended range coupling. In order to facilitate the connection a custom built coupling is currently being manufactured by Romac Industries and is schedule for delivery on 10/6/14. This FCR includes 1.5 day of work to make the connection with labor and equipment and the cost of the coupling.

SHA has attached an itemized cost breakdown of the FCR, the daily reports for 9/25/14 and 9/26/14, the material quote (to include freight) and a manufacturers drawing of the coupling, including the bolt materials (316L Stainless) and the Fusion Bonded Epoxy coating.

The lump sum price for FCR-047 is-

\$7,985.78 5072

All other scopes of work will apply per the previous narrative scope of work. If you have any questions please feel free to give me a call at 228-297-6885.

(b)(6)

S.H. Anthony, Inc. 10145 Southpark Drive Gulfport, MS. 39503

Cc/

file

(b)(6)

President

#### FCR NNS12AA95T-047 UPGRADE TO POTABLE WATER SYSTEM 11B315-01 REVISED COUPLING 1 OCTOBER 14

FCR 047 Cost Estimate Revised Coupling J-Road Trent Lott

				Mat'l		Labor		Equip.		item
<u> Item</u>	Description	QTY	Unit	\$/Unit	Mat'l \$	\$/Unit	Labor \$		Equip. \$	Total
1		0		Section .	\$0.00	⊕ 55 \$0.0	\$0	100	\$0	\$0
2	Special Order Coupling	1	EA	1,485.00	\$1,485.00		\$0	\$0.00	\$0	\$1,485
3 4	Freight	1	EA	\$700.00	\$700.00	\$0.0	\$0	\$0.0	\$0	\$700
5		0		\$0.00	\$0.00 \$0.00	\$0.0 \$0.0	\$0 \$0	\$0.0	\$0	\$0
6		ŏ	i i	\$0.00	\$0.00	\$0.05	\$0	\$0.0 \$0.0	\$0 <b>\$0</b>	\$0 <b>\$0</b>
7		ŏ	[	\$0.00	\$0.00	\$0.00	\$0	\$0.00	\$0 \$0	\$0 \$0
8		l		\$0.00	\$0.00	\$0.08	\$0	\$0.00	\$0	\$0 \$0
9	Excav & BF (Labor)	8	HR	\$0.00	\$0.00	\$31.56	\$252	\$0.00	\$0	\$252
10	Excav Equipment(3/4 CY BH)	1	Day	\$0.00	\$0.00	\$0.0	\$0:	\$250.00	\$250	\$250
11		0	1	\$0.00	\$0.00	\$0.00	\$0	\$0.02	\$0	\$0
12	Add Labor(new coupling)	4	HR	\$0.00	\$0.00	\$25.00	\$100	\$0.0	\$0	\$100
13	Deduct Labor(old coupling)	-2	HR	\$0.00	\$0.00	\$25.00	-\$50	\$0.05	\$0	-\$50
14		0		\$0.00	\$0.00	\$0.00	\$0	\$0.0	\$0	\$0
15	ľ	0		\$0.00	\$0.00	\$0.05	\$0	\$0.0	\$0	\$0
16		0		\$0.00	\$0.00	\$0.00	\$0	\$0.09	\$0	\$0
18		0		\$0.00	\$0.00 \$0.00	\$0.01	\$0 \$0	\$0.0E	\$0. \$0	\$0
19		Ö		\$0.00	\$0.00	\$0.08 \$0.08	\$0	\$0.05	\$0 \$0	\$0 \$0
20	Safety	1 1	HR	\$0.00	\$0.00	\$50.00	\$50	\$0.08	\$0 \$0	\$50
21	Superintendant	2	HR	\$0.00	\$0.00	\$55.00	\$110	\$0.00	\$0	\$110
22	Project Management	4	HR	20.00	\$0.00	355.00	\$220	39.00	\$0	\$220
-						20), 2-0222	,		***	1[
		BAI	RE COST	TOTALS	2,185	1	682	- 1	250	3,117
					-		-	1	- [	•
	Safety Supplies & Sma		_		1 - I		43	1	- 1	43
	On-Sit	e Rentais	@ 8% R	aw Labor	-	- 1	55		-	55
		Fuel @	g) 3.4% R	aw Labor	-		23		-	23
				B TOTAL	2,185		803		250	3,238
				Tax (9%)	197		- 1		-	197
				d (5.97%)	130		48		15	193
		La	bor Bure	den (37%)	18		252.34		-	270
			- 1	ee (15%)	379.45		165.45		39.74	585
		SUB CON	TRACTO	R TOTAL	\$2,909		\$1,268	","	\$305	\$4,482
777	Prime Contractor Labor			-			1	- 1		
1	Safety	1	HR	30.00	\$0.00	200.00	\$50	20.00	\$0	\$50
2	Superintendant	2	HR	\$0.00	\$0.00	\$50.0	\$100	\$0.00	\$0	\$100
3	Project Management	2	HR	80.00	\$0.00	200.00	\$110	80.00	\$0	\$110
							1		- 1	
				B TOTAL	-		260		-	260
	PRIME CONTR				180.95		95.07		18.95	295
	PRIME C	ONTRAC			291	- 1	153		30	474
		Gross Re	•		101.82		53.49		10.66	166
				d (0.63%)	219		115		23	358
	PR	IME CON	<b>FRACTO</b>	R TOTAL	\$793		\$677		\$83	\$1,553
		C	ONTRAC	T TOTAL	\$3,702		\$2,205		\$388	\$6,295
									lane.	