

MEMORANDUM

March 14, 2011

TO:

Board of Mayor and Aldermen

FROM:

Eric S. Stuckey, City Administrator

Eric J. Gardner, P.E., Director of Engineering

David Parker, P.E., City Engineer

SUBJECT: Simmons Ridge Sanitary Sewer Project - Change Order No. 2

Purpose

The purpose of this memo is to provide the Board of Mayor and Aldermen (BOMA) with information to consider Change Order No. 2 for the Simmons Ridge Sanitary Sewer Project.

Background

Combined into one contract for American Recovery and Reinvestment Act/State Revolving Loan Fund (ARRA/SRF) funding purposes are three jobs: Country Road Low Pressure Sewer System, Boyd Mill Low Pressure Sanitary Sewer System and the Simmons Ridge Sanitary Sewer Project. W.L. Hailey & Company Inc. was awarded the construction contract for these projects by BOMA on December 17, 2009. The two neighborhood sanitary sewer projects, Country Road Low Pressure System and Boyd Mill Low Pressure System, are now complete. The Simmons Ridge Sanitary Sewer Project is an interceptor sewer project that is not yet complete. The original contract period for these projects expired on February 15, 2011. The contractor is requesting a contract extension total of 47 days which would make the amended completion date April 3, 2011. This is an adequate extension to compensate for lost time due to adverse weather. However, even by granting the additional 47 days, it is possible that the contractor may not complete the project within the allotted contract time.

In addition, the contractor has requested a stoppage of work until the Harpeth River is at a manageable level to complete the river crossing. Staff believes that it is in the City's best interest to grant this request due to the current flow of the river as crossing is ill-advised and would violate our Aquatic Resource Alteration Permit (ARAP) through the Tennessee Department of Environment and Conservation (TDEC). Staff is working with the contractor and our consultant to determine the appropriate time at which to stop the contract time. It will likely be the time at which the contractor completes the installation of the downstream manhole that is adjacent to the river. At such time when the Harpeth River is at low flow, the contractor will return to complete the job and the contract time will resume. By granting this requested stoppage of work, no additional cost or contract time will be added to the contract. The delay in this project will have no impact on service to our existing customers.

Financial Impact

No Financial Impact to the City of Franklin as a result of this Change Order.





Recommendation

Staff recommends approving Change Order No. 2 to add 47 days to the contract for the Simmons Ridge Sanitary Sewer Project. Staff also recommends granting a stoppage of work until the Harpeth River is at a more manageable level of flow. Staff will report back to the Board when the actual date of stoppage is determined and the new estimated project completion date.





March 14, 2011

Ms. Patricia Proctor City of Franklin 109 3rd Avenue South Franklin, Tennessee 37065 Callas

Element

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RE:

ARRA CLEAN WATER PROJECTS – Simmons Ridge Sanitary Sewer, Boyd Mill Low

klauston

Pressure Sewer, and Country Road Low Pressure Sewer

Same

Change Order No. 2

SSR No. 07-41-003.0 / Loan No. CGA 2009-250

hample.

Dear Ms. Proctor:

P40-48-1

Attached please find an original copy of Change Order No. 2, along with information from W.L. Hailey & Company detailing weather and blasting delays. W.L. & Company has requested approximately 55 days due to rain, snow, and flooding delays between June and February. Approximately 8 days were submitted for months where below average rain or snow fall took place. These days were subtracted from W.L. Hailey's request to give approximately 47 total weather days. The original final completion date was February 15, 2011. Adding these days will extend the final completion date to April 3, 2011. SSR believes this request to be fair and reasonable.

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W.L. Hailey & Company has also requested a stoppage of work until the Harpeth River is at a manageable level. W.L. Hailey has requested this stoppage of work until the river level is low enough to complete the crossing. SSR feels granting this request would be in the best interest of the City. Working in the river is nearly impossible at this time, would violate our general permit, and also bring major complaints from local organizations. As stated in our general ARAP permit for utility line crossings all work in and around the Harpeth River must be performed during low flow periods. The stoppage of work date can be requested in writing anytime before the Final Completion date of April 3, 2011. Once this request has been received all pipe installation will cease until the river is determined to be at manageable level by the inspector or engineer. Days accumulated between the stoppage of work date and the Final Completion date will be added to the TBD re-start date. When the re-start date is determined the contractor will then be given permission to resume all work as necessary to complete the project.

Ms. Patricia Proctor March 14, 2011 Page 2 of 2

Once the change order has been approved by the board we will then submit a signed copy along with all other pertinent information to the Tennessee State Revolving Fund Loan Program for their approval. If you have any questions regarding this change order, please call me at (615)460-0543.

Sincerely,

SMITH SECKMAN REID, INC.

Paolo M. Fonda, P.E.

Cc: Mark Hilty - FWMD

Randy Anglin - SRF

Greg Atkinson – W.L. Hailey & Company, Inc.

JHB, File (12)

DATE: March 14, 2011 OWNER: City of Franklin, Tennessee

PROJECT: ARRA Clean Water Projects - Simmons Ridge Sanitary Sewer

LOAN NO.: CGA 2009-250

ENGINEER: Smith Seckman Reid, Inc.

CONTRACTOR: W.L. Hailey & Company, Inc.

Description:

W.L. Hailey & Company has requested a contract extension due to weather delays and the height of the river. They have requested 55 weather days due to precipitation and flooding of their trench. SSR has recommended 47 weather days be added to the contract time. They have also requested a stoppage of time until the Harpeth River returns to manageable levels.

Reason for Change Order:

Rain and snow fall was considered above average for the months of June, July, August, November, December, January, and February. High flows in the Harpeth River have delayed W.L. Hailey from installing the pipe across the river.

Attachments: (List documents supporting change)

- 1. Letters and weather information from W.L. Hailey to Mr. Eric Stuckey.
- 2. Email dated March 3, 2011 from Greg Atkinson detailing weather days for the month of February.

| CHANGE IN CONTRACT PRICE: |
|--|
| Original Contract Price: |
| |
| \$ 1,183,474.00 |
| Net Increase (Decrease) from Previous Change Orders: |
| |
| \$ 19,760.00 |
| Contract Price prior to this Change Order: |
| |
| \$ 1,203,144.00 |
| Net Increase (Decrease) of this Change Order: |
| |
| NA |
| Contract Price with all approved Change Orders: |
| |
| \$ 1,203,144.00 |

| CHANGE IN CONTRACT TIMES: | | | | |
|--|--|--|--|--|
| Notice to Proceed: February 15, 2010 | | | | |
| Final Completion: 365 days – February 15, 2011 | | | | |
| Ready for Final Payment: 455 days - May 15, 2011 | | | | |
| Net Change from Previous Change Orders: | | | | |
| Final Completion: 0 days | | | | |
| Ready for Final Payment: 0 days | | | | |
| Contract Times prior to this Change Order: | | | | |
| Final Completion: 365 days – February 15, 2011 | | | | |
| Ready for Final Payment: 455 days – May 16, 2011 | | | | |
| Net Increase (Decrease) this Change Order: | | | | |
| Final Completion #1: 412 days - April 3, 2011 | | | | |
| Ready for Final Payment: 502 days – July 2, 2011 | | | | |
| Contract Times with all approved Change Orders: | | | | |
| **Final Completion #1: 412 days - April 3, 2011** | | | | |
| **Ready for Final Payment: 502 days – July 2, 2011** | | | | |

The attached Terms of Agreement are made a part of this Change Order along with the above requirements.

| RECOMMENDED: | APPROVED: | ACCEPTED: |
|-------------------------------------|---------------------------------|--|
| By: ENGINEER (Author)zed Signature) | By:OWNER (Authorized Signature) | By: CONTRACTOR: (Authorized Signature) |
| DATE: MARCH 14, 2011 | DATE: | DATE: |

^{**}Final Completion and Payment dates subject to change based on actual stoppage of work date requested by W.L. Hailey and Company, Inc. Date shall be approved by the City of Franklin, Tennessee**



March 3, 2011

W.L. Hailey & Company Inc. 2971 Kraft Drive Nashville, TN 37204

City of Franklin, Tennessee 109 3rd Avenue South Franklin, TN 37064

Attn.: Mr. Eric Stuckey

City Administrator

Re:

Simmons Ridge Sanitary Sewer

ARRA 2009 Clean Water Projects

Subject: Request for Extension to Contract Schedule

Dear Mr. Eric Stuckey:

W.L. Hailey has been working incessantly to complete the Simmons Ridge Sanitary Sewer project in the most time effective manner possible. We understand the City of Franklin's Board Members will review our request for time extension this upcoming meeting (March). We respectfully wish to extend our time request for the period: February 24th through March 2nd. During this time, heavy rainfall flooded our trench, creating an impossible work environment. We exhausted our resources to keep the pressure head low enough on our plugged, newly installed sewer line, in order to keep the pump station located on Ascot Lane from flooding.

The trench is not completely 'shot out' with explosives near station 23+50 at the Harpeth River. The unshot rock strata is working as a natural check dam, however the flooded Harpeth River has breached this rock strata and flooded our work area. Our work area is approximately 1700 linear feet away from the river, near station 6+00. Attached you will find pictures detailing our dilemma and rain data supporting this time period: 'Schedule D'. We respectfully request (5) working days to be added to our contract time to cover missed days due to flooding.

Sincerely.

W.L. Hailey and Company, Inc.

Gregory Atkinson

Project Engineer

cc:

M. Hilty, City of Franklin, TN

P. Fonda, SSR J. Evans, WLH

'Article D'

Weather Days Due to Trench Flooding

| DATE: | DAY: | DESCRIPTION: | NATIONAL OCEANIC & ATMOSPHERIC ADMINISTRATION - RAINFALL (in.) |
|-----------|----------|--------------|--|
| 2/24/2011 | THURSDAY | RAIN | 2.10 |
| 2/25/2011 | FRIDAY | RAIN | 1.66 |
| 2/28/2011 | MONDAY | RAIN | 1.63 |

Paolo Fonda

From: Sent:

To: Subject:

Greg Atkinson [GAtkinson@wlhailey.com] Thursday, March 03, 2011 10:47 AM Paolo Fonda Pay Estimate #8 Rain Days +Plus+ Remaining February Rain Days

Paolo,

February and January weather days detailed from my previous email sent 2/23/2011 pertaining to Pay Estimate #8.

| DATE: | DAY: | DESCRIPTION: | NATIONAL OCEANIC & ATM | NATIONAL OCEANIC & ATMOSPHERIC ADMINISTRATION | NOTES: |
|-----------|-----------|--------------|-------------------------|---|--|
| | | | RECORDED RAINFALL (in.) | RECORDED SNOWFALL (in.) | |
| 1/26/2011 | WEDNESDAY | RAIN & SNOW | 0.14 | 1.10 | |
| 1/28/2011 | FRIDAY | SNOW | 0.00 | 0.00 | SNOW IMPACT |
| 1/31/2011 | MONDAY | SNOW | 0.05 | 0.00 | SNOW IMPACT |
| 2/7/2011 | MONDAY | RAIN & SNOW | 0.35 | 0.70 | THE TRANSPORT OF THE PROPERTY |
| 2/9/2011 | WEDNESDAY | RAIN & SNOW | 0.14 | 1.40 | |
| 2/10/2011 | THURSDAY | SNOW | 0.00 | 0.00 | SNOW IMPACT |
| 2/21/2011 | MONDAY | RAIN | 0.32 | 0.00 | |
| 2/24/2011 | THURSDAY | RAIN | 2.10 | 0.00 | in bestyren extension protective for the state of the sta |
| 2/25/2011 | FRIDAY | RAIN | 1.66 | 0.00 | |
| 2/28/2011 | MONDAY | RAIN | 1.63 | 0.00 | SHERRAN SCHOOL STANDARD SOM THE STREET SHEET SHEET SHEET STANDARD SANDARD SOM THE STANDARD SHEET SHEET SHEET S |

Regards,

Gregory R Atkinson

Project Engineer W.L. Halley & Company, Inc. O: (615) 884-2823 C: (615) 642-5765



February 11, 2011

W.L. Hailey & Company Inc. 2971 Kraft Drive Nashville, TN 37204

City of Franklin, Tennessee 109 3rd Avenue South Franklin, TN 37064

Attn.:

Mr. Eric Stuckey

City Administrator

Re:

Simmons Ridge Sanitary Sewer

ARRA 2009 Clean Water Projects

Subject: Request for Extension to Contract Schedule

Dear Mr. Eric Stuckey:

The letter we sent dated January 31, 2011, 'Request for Extension to Contract Schedule' referred to 45 weather days affecting our construction progress. These weather days are provided with more detail attached in 'Article A'.

This past December, SSR reviewed our weather day requests compiled through November 24, 2010, comprising 28 of the 45 days referred to in 'Article A'. Two weather days were approved for the month of November and the other 26 days were deemed out of compliance under technical specification section 6.15. The 26 out of compliance days were accumulated under below average rain fall months, or submitted beyond 30 calendar days.

December accrued 4 weather days. The December snowfall total was 4.5", surpassing the monthly average of 0.5". January accrued 13 weather days and February has presently accrued 4 weather days. The monthly summary for January & February is not yet available online for evaluation.

The drilling subcontractor, C&C Equipment, has submitted a letter detailing the delay circumstances they encountered with subsurface rock conditions. This letter is attached as 'Article B'.

The impervious rock conditions found between station 0+00 & station 9+95 strained our progress greatly. You'll find the additional blast measures C&C Equipment Company outlined ('Article B'); however, we were still left to hoe-ram 2.5' off the south trench face and in some places hoe-ram 8' from the bottom of trench. Our pipe laying production schedule due to hoe-ram activity is attached as 'Article C' for your informational purposes. We hope this information meets the aid in your decision.

Sincerely,

W.L. Hailey and Company, Inc.

Gregory Atkinson Project Engineer

cc: M. Hilty, City of Franklin, TN

P. Fonda, SSR J. Evans, WLH

'Article A'
Weather Delay Summary

| 5/26/2010 - 0 | 5/25/2010 | | 11/25/2010 - | 1/21/2010 | |
|---------------|-------------|--------------------|----------------|-------------|--------------------|
| Date | Event | Accumulation (in.) | Date | Event | Accumulation (in.) |
| 6/9/2010 | Rain | 0.44 | 12/1/2010 | Rain | 0.78 |
| 6/10/2010 | Rain | 1.11 | 12/3/2010 | Rain Impact | 0.00 |
| 6/11/2010 | Rain Impact | 0.00 | 12/13/2010 | Snow | 2.00 |
| 6/18/2010 | Rain | 1.29 | 12/16/2010 | Snow Impact | 0.19 |
| | | | 1/5/2011 | Rain/Snow | 0.08 |
| 6/26/2010-7/ | 22/2010 | | 1/10/2011 | Snow | 2.00 |
| Date | Event | Accumulation (in.) | 1/11/2011 | Snow | 2.00 |
| 6/27/2010 | Rain | 0.90 | 1/12/2011 | Snow Impact | 2.00 |
| 6/29/2010 | Rain | 0.76 | 1/18/2011 | Rain | 0.18 |
| 7/12/2010 | Rain | 1.90 | 1/19/2011 | Rain | 0.19 |
| 7/13/2010 | Rain | 1.46 | 1/20/2011 | Snow | 1.20 |
| 7/14/2010 | Impact | 0.18 | 1/21/2011 | Snow Impact | 1.20 |
| 7/23/2010 - 9 | /23/2010 | | 1/24/2011 - 2/ | /11/2011 | |
| Date | Event | Accumulation (in.) | Date | Event | Accumulation (in.) |
| 8/5/2010 | Rain | 0.75 | 1/24/2011 | Snow Impact | 0.00 |
| 8/6/2010 | Rain | 0.54 | 1/25/2011 | Snow Impact | 0.04 |
| 8/18/2010 | Rain | 2.08 | 1/26/2011 | Snow | 1.20 |
| 8/19/2010 | Rain | 2.17 | 1/28/2011 | Snow | 1.20 |
| 8/20/2010 | Rain Impact | 0.00 | 1/31/2011 | Snow Impact | 0.05 |
| 9/10/2010 | Rain | 0.61 | 2/1/2011 | Rain | 0.83 |
| | | | 2/7/2011 | Snow | 1.20 |
| 9/24/2010 - 1 | 1/24/2010 | | 2/9/2011 | Snow | 1.20 |
| Date | Event | Accumulation (in.) | 2/10/2011 | Snow | (Unavailable) |
| 10/12/2010 | Rain | 0.33 | | | |
| 10/25/2010 | Rain | 1.51 | | | |
| 10/26/2010 | Rain | 0.00 | | | |
| 10/27/2010 | Rain | 0.52 | | | |
| 10/28/2010 | Rain Impact | 0.00 | | | |
| 11/2/2010 | Rain | 0.00 | | A | |
| 11/4/2010 | Rain | 0.34 | | ** | |
| 11/5/2010 | Rain | 0.00 | | | |
| 11/16/2010 | Rain | 0.19 | | | |
| 11/17/2010 | Rain | 0.75 | | | |
| 11/18/2010 | Rain Impact | 0.00 | | | |
| 11/23/2010 | Rain | 0.80 | | | |
| 11/24/2010 | Rain | 0.24 | | | |
| | | | | | |

February 14, 2011

C&C Equipment Company 3101 Essary Road Suite 1 Knoxville, TN 37918

City of Franklin, Tennessee 109 3rd Avenue South Franklin, TN 37064

Attn.:

Mr. Eric Stuckey
City Administrator

Re:

Simmons Ridge Sanitary Sewer ARRA 2009 Clean Water Projects

Subject: Aberrant Rock Conditions at Simmons Ridge

Dear Mr. Eric Stuckey:

We originally planned to drill a 'Dice 5' pattern, which means 5 drill holes per 6 linear trench feet. We started drilling near manhole A3 at station 9+95, finishing at station 0+00. After 3 unsuccessful blast attempts, we tried different combinations of explosives with no success. The rock was not thoroughly fragmenting. We had to re-drill these three areas, and begin drilling 7 holes per 6 linear trench feet.

The 2 extra holes per 6 linear trench feet created 332 additional drill holes between station 9+95 & station 0+00. Each drill hole, including sub-drill, was 32'-39' deep. The 332 additional drill holes averaging 35' deep, generated 11,620 additional drill feet. Our production rate is 800 drill feet per day; thus, 15 extra days were spent drilling these holes.

Each drill hole required three decks (opposed to 1 in our quote) of powder, blasting caps and stemming stone. Our typical production to load and blast holes 35' deep is 40 holes per day. Because we were triple decking each hole, our production became 14 holes per day. This generated 62 additional days to load and blast holes.

Original: 21 days – drill 5 holes/6 linear feet, load 40 holes/day Actual: 83 days – drill 7 holes/6 linear feet, load 14 holes/day

In addition, the unsuitable ground surface conditions required casing 500 linear trench feet of drill holes. The contractor covered the cost of casing material; however, we spent nearly 3 weeks installing the casing pipe.

All things considered, we spent approximately 92 total working days to drill 2 additional holes per 6 linear trench feet, triple deck each hole rather than single deck, and case 500 linear trench feet of drill holes.

Very Truly Yours, C&C Equipment Company

Norman G. Collingsworth

Vice President

(age 2-14-11

cc:

M. Hilty, City of Franklin, TN P. Proctor, City of Franklin, TN

P. Fonda, SSR

J. Evans, WLH

S. Kelley, WLH

'Article C'
Pipe Laying Production Due to Hoe-Ram Activity

| Date | Beginning Station | Ending Station | Estimated Footage | Actual Footage |
|-----------|-------------------|-------------------|-------------------|-------------------|
| 1/13/2011 | 0+00 | 0+28 | 151.8 | 28 |
| 1/14/2011 | 0+28 | 0+41 | 151.8 | 13 |
| 1/17/2011 | 0+41 | 0+61 | 151.8 | 20 |
| 1/18/2011 | 0+61 | 0+81 | 151.8 | 20 |
| 1/19/2011 | 0+81 | 1+01 | 151.8 | 20 |
| 1/20/2011 | 1+01 | 1+01 | 151.8 | 0 |
| 1/21/2011 | 1+01 | 1+21 | 151.8 | 20 |
| 1/24/2011 | 1+21 | 1+41 | 151.8 | 20 |
| 1/25/2011 | 1+41 | 1+61 | 151.8 | 20 |
| 1/26/2011 | 1+61 | 1+61 | 151.8 | 0 |
| 1/27/2011 | 1+61 | 1+81 | 151.8 | 20 |
| 1/28/2011 | 1+81 | 1+81 | 151.8 | 0 |
| 1/31/2011 | 1+81 | 1+81 | 151.8 | 0 |
| 2/1/2011 | . 1+81 | 2+01 | 151.8 | 20 |
| 2/2/2011 | 2+01 | 2+21 | 151.8 | 20 |
| 2/3/2011 | 2+21 | 2+41 | 151.8 | 20 |
| 2/4/2011 | 2+41 | 2+61 | 151.8 | 20 |
| 2/7/2011 | 2+61 | 2+81 | 151.8 | 20 |
| 2/8/2011 | 2+81 | 3+01 | 151.8 | 20 |
| 2/9/2011 | 3+01 | 3+21 | 151.8 | 20 |
| 2/10/2011 | 3+21 | 3+21 | 151.8 | 0 |
| 2/11/2011 | 3+21 | 3+21 | 151.8 | 0 |



January 31, 2011

W.L. Hailey & Company Inc. 2971 Kraft Drive Nashville, TN 37204

City of Franklin, Tennessee 109 3rd Avenue South Franklin, TN 37064

Attn.:

Mr. Eric Stuckey City Administrator

Re:

Simmons Ridge Sanitary Sewer

ARRA 2009 Clean Water Projects

Subject: Request for Extension to Contract Schedule

Dear Mr. Eric Stuckey:

Work on the Simmons Ridge Sanitary Sewer project has progressed at an agonizing, slow pace; the means of which exceeding our control. Our crews have been delayed 45 days due to rain and impact events. The recent January rain and snow activity have created a near impossible river crossing scenario. Our preliminary construction schedule enlisted crossing the Harpeth River in late August, early September. However, unpredictable rock conditions breached our rock blasting operations during late summer. The rock has several voids, restraining blast impact from thoroughly fragmenting rock. Some areas of our presplit trench required us to repeat drill and blast operations, yet further mechanical rock fragmenting was required for the bottom 8 feet. This dilemma pushed our construction schedule into the wet, winter months, and created the complication we now face with the Harpeth River crossing. We understand time is of the essence, and we have adamantly worked to meet the time constraints set forth with this contract.

We respectfully request an extension to the contract completion date of February 15, 2011 to a new milestone date of March 15, 2011. By March 15, 2011 the project will be complete, apart from station 21+95 to station 28+95. The breadth of this portion is withheld by the river crossing. Upon the March 15, 2011 milestone, we request a contract stoppage until river conditions become adept, but limited by May 31, 2011. Finally, we reverently request 22 days to complete the contract, once work recommences, connecting station 21+95 to station 28+95.

Very Truly Yours,

W.L. Hailey and Company, Inc.

Gregory Atkinson Project Engineer

cc:

M. Hilty, City of Franklin, TN

P. Proctor, City of Franklin, TN

P. Fonda, SSR

J. Evans, WLH

S. Kelley, WLH