

Sponsored by: Hernstadt

**CITY OF MARATHON, FLORIDA  
RESOLUTION 2012-10**

**A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF MARATHON, FLORIDA, APPROVING CHANGE ORDER NO. 8 TO FOUNTAIN ENGINEERING CORPORATION (FOUNTAIN) CONTRACT DATED MAY 25, 2010 FOR SERVICE AREA 7 WASTEWATER AND STORMWATER IMPROVEMENTS IN THE ORIGINAL AMOUNT OF \$3,571,229.67 FOR VARIOUS CITY REQUESTED CHANGES IN THE AMOUNT OF \$46,171.82; ADDING 90 DAYS TO SUBSTANTIAL AND FINAL COMPLETION; AUTHORIZING THE CITY MANAGER TO EXPEND BUDGETED FUNDS; AUTHORIZING THE CITY MANAGER TO EXECUTE ALL NECESSARY DOCUMENTS ON BEHALF OF THE CITY; AND PROVIDING FOR AN EFFECTIVE DATE.**

**WHEREAS**, the City of Marathon, Florida (“City”) entered into a contract with Fountain Engineering, Inc. (“Fountain”) for the construction of the Service Area 7 Stormwater and Wastewater Collection System Project (“Project”) in May of 2010 (“Contract”); and

**WHEREAS**, several changes to the Project have been made since the City and Fountain entered into the Contract that have resulted in an increase in the Contract price in an amount not to exceed \$46,171.82, and an extending the substantial and final completion dates of the Project by 90 days.

**NOW, THEREFORE, BE IT RESOLVED BY THE CITY COUNCIL OF THE CITY OF MARATHON, FLORIDA, THAT:**

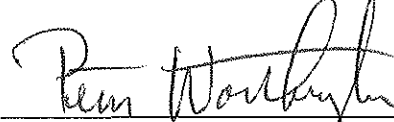
**Section 1.** The above recitals are true and correct and incorporated herein.

**Section 2.** Change Order No. 8 to the Contract between the City and Fountain attached hereto as Exhibit “A,” is hereby approved. The City Manager is authorized to execute the Change Order and expend budgeted funds on behalf of the City.

**Section 3.** This resolution shall take effect immediately upon its adoption.

**PASSED AND APPROVED BY THE CITY COUNCIL OF THE CITY OF MARATHON, FLORIDA, THIS 10<sup>th</sup> DAY OF JANUARY, 2012.**

**THE CITY OF MARATHON, FLORIDA**

  
\_\_\_\_\_  
**Pete Worthington, Mayor**

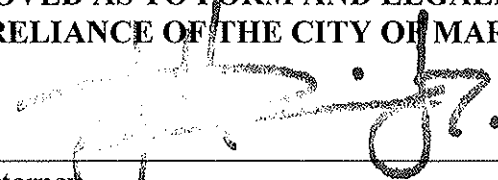
AYES: Cinque, Keating, Ramsay, Snead, Worthington  
NOES: None  
ABSENT: None  
ABSTAIN: None

**ATTEST:**

  
\_\_\_\_\_  
Diane Clavier, City Clerk

(City Seal)

**APPROVED AS TO FORM AND LEGALITY FOR THE USE  
AND RELIANCE OF THE CITY OF MARATHON, FLORIDA ONLY:**

  
\_\_\_\_\_  
City Attorney

CHANGE ORDER NO. 8

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TO: City of Marathon

PROJECT: City of Marathon Service Area 7 Wastewater and Stormwater Improvements Contract dated May 25th, 2010, in the amount of \$3,571,229.67.

ENGINEER: Weiler Engineering Corporation

CONTRACTOR: Fountain Engineering Inc.

DATE: January 10, 2012

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This Change Order will authorize the following change to the Agreement:

The Work as set forth in the Agreement is hereby amended to include the items set forth on Exhibit "A" attached hereto and by this reference made a part hereof.

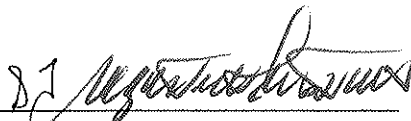
This Change Order constitutes full, final, and complete compensation to the Contractor for all costs, expenses, overhead, and profit, and any damages of every kind that the Contractor may incur in connection with the above referenced changes in the Work, and any other effect on any of the Work under this Agreement. The Contractor acknowledges and agrees that (a) the Contract Price of \$ 3,571,229.67 under the Agreement will be **changed** by this Change Order, and (b) the schedule for performance of Work will be **changed** by this Change Order. Contractor expressly waives any claims for any additional compensation, damages or time extensions in connection with the above-referenced changes. Except as herein or heretofore expressly modified, all terms of the Agreement shall remain in full force and effect and shall cover the performance of, and payment for, any work authorized hereunder. Any defined terms not defined in this Change Order shall have the meanings set forth in the Agreement.


By signing below the parties indicate acceptance of this Change Order as set forth herein.

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THE CITY OF MARATHON  
a Florida municipal corporation

CONTRACTOR

By:   
Name: Roger Hernstadt  
Title: City Manager

By:   
Name: Calicia Landry  
Title: Manager

END OF SECTION

## CHANGE ORDER SUMMARY

Change Order No.           8        
Project Title         Service Area 7 Wastewater and Stormwater Improvements  
Bid No.                  N/A    
Owner:                 City of Marathon  
Contractor:            Fountain Engineering Inc.  
Agreement Date:       May 25, 2010

This Change Order is necessary to cover changes in the work to be performed under this Agreement. The GENERAL CONDITIONS, SUPPLEMENTARY CONDITIONS, and STANDARD SPECIFICATIONS apply to and govern all work under this Change Order.

### THE FOLLOWING CHANGES ARE MADE TO THE CONTRACT DOCUMENTS:

(1)	Original Contract Price	<u>\$ 3,571,229.67</u>
(2)	Current Contract Price (Adjusted by Previous Change Orders)	<u>\$ 3,647,218.69</u>
(3)	Total Proposed Change in Contract Price	<u>\$ 46,211.82</u>
(4)	<b>New Contract Price (Item 2 + Item 3)</b>	<b><u>\$ 3,693,430.51</u></b>
(5)	Original Contract Time (Substantial)	<u>300 Days</u>
(6)	Original Contract Time (Final)	<u>320 Days</u>
	<u>Adjustments by Previous Change Orders: \$230,848.36</u>	
(7)	Substantial Completion	<u>448 Days</u>
(8)	Final Completion	<u>468 Days</u>
(9)	Total Proposed Change in Contract Time	<u>90 Days</u>
(10)	<b>New Substantial Contract Time (Item 7 + Item 9)</b>	<b><u>538 Days</u></b>
(11)	<b>New Final Contract Time (Item 8 + Item 9)</b>	<b><u>558 Days</u></b>
(12)	Original Contract Substantial Completion Date	<u>May 29, 2011</u>
(13)	Original Contract Final Completion Date	<u>June 18, 2011</u>
(14)	<b>New Contract Substantial Completion Date</b>	<b><u>Jan 22, 2012</u></b>
(15)	<b>New Contract Final Completion Date</b>	<b><u>Feb 11, 2012</u></b>

# EXHIBIT "A"

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## CHANGES ORDERED

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### ITEM 1 – Credit for 10" Storm Water Well

**Description of Change:** Delete one 10" storm water injection well from contract

**Reason for Change:** A 10" well was removed from the scope of work due to changes in the stormwater design initiated by requests from property owners. In this case, a resident preferred that the storm water continue to sheet flow onto his property. After the property owner signed a release, the City directed us to remove the swales and associated infrastructure. This change does NOT allow any contribution of runoff to wetlands or surface waters.

**Scope of Work:** N/A

**Change in Contract Price:** -\$23,341.24

**Change in Contract Time:** 0 Days

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### ITEM 2 – Reduction in 18" Perforated Pipe, Type B

**Description of Change:** Reduce the contract amount of Type B Perforated 18" storm drainage pipe by 300 linear feet

**Reason for Change:** Due to quantity under-runs on this item, the piping will not be installed. Reduce quantity by 150 linear feet at the unit cost of \$82.63 per foot.

**Scope of Work:** N/A

**Change in Contract Price:** -\$12,394.50

**Change in Contract Time:** 10 Days

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### ITEM 3 – Credit for Well Control Structure

**Description of Change:** Delete the well control structure associated with the deleted 10" injection well.

**Reason for Change:** Since the 10" injection well was removed from the project at a property owner's request, the associated well control structure is no

longer needed. This change does NOT allow any contribution of runoff to wetlands or surface waters.

**Scope of Work:** N/A  
**Change in Contract Price:** -\$6,778.68  
**Change in Contract Time:** 0 Days

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**ITEM 4 – Credit for Blue Isle Patching**

**Description of Change:** Apply a credit since Fountain does not have to perform the normal trench patching associated with the sewer construction

**Reason for Change:** In normal roadways, Fountain was required by contract to hot patch the roadway as part of the restoration included in the cost of the piping. Since the need for trench patching is removed, the City is due a credit for the amount of patching removed from the project.

**Scope of Work:** Main line trench for gravity sewer, with manholes and laterals would result in a reduction of 218 square yards of patching at \$23.79 per SY

**Change in Contract Price:** -\$5,186.22  
**Change in Contract Time:** 0 Days

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**ITEM 5 – Construction of Blue Isle Drive**

**Description of Change:** Add construction of approximately 675 square yards of asphalt roadway to replace deteriorated and substandard existing road.

**Reason for Change:** The pavement at the end of Blue Isle Drive was severely deteriorated the existing asphalt was very thin when construction of the sewer system began. The very thin asphalt with an unstable base could not support the construction equipment and was subsequently destroyed during the construction of the sewers. There is so little asphalt remaining that it is impractical to try to patch the roadway as was typically done. It is proposed instead that Fountain install a structural course of 2” of Type S-I asphalt on a properly prepared road base.

**Scope of Work:** Remove remaining existing asphalt, scarify the limerock road base. Add limerock base as needed. Compact and prepare the road base, including density testing. Sealcoat the prepared road bed and place 2” of Type S-I asphalt, bringing final grade to match the elevations of wastewater structures and to promote positive drainage. Cost of work will be \$38.06 per square yard.

**Change in Contract Price:** \$25,690.50

Change in Contract Time: 15 Days

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**ITEM 5 – 46<sup>th</sup> Street Asphalt Overlay**

**Description of Change:** Provide milling and first course, limerock and asphalt leveling course as needed. Final overlay with Type S-III asphalt. Concrete collar repair and upper chamber of vacuum pit included.

**Reason for Change:** Asphalt overlay of this street was removed from the Globetec scope of work due to on-going water main and sewer lateral work. That work has now been completed and the final overlay and associated grade adjustments can be performed.

**Scope of Work:** Adjust final grade of asphalt hot patch per plan, milling where needed and adding leveling course as needed. Repair concrete collars on 4 vacuum pits, 2 cleanouts and one storm inlet. Remove and replace upper chamber of vacuum pit (City to supply the materials for the vacuum pit upper chamber R&R). Unit costs from Area 3 to be honored where applicable.

**Change in Contract Price:**

Item	Units	Qty	Unit \$	Total \$
Overlay, 1" Type S-III Asphalt	SY	1100	\$10.98	\$12,078.00
Mill & Patch, 1.5" Type S-I Asphalt	SY	140	\$23.79	\$3,330.60
Asphalt Leveling Course	Ton	25	\$146.38	\$3,659.50
Limerock, Avg 3" thick	SY	25	\$15.56	\$389.00
Replace concrete collar, Vac Pit	EA	4	\$244.45	\$977.80
Repalce concrete collar, cleanout	EA	2	\$121.78	\$243.56
Replace concrete collar, storm inelt	EA	1	\$247.95	\$247.95
Replace upper chamber, vac pit (City materials)	EA	1	\$1,249.00	\$1,249.00
Additional Construction elevations, grade pins as needed	LS	1	\$1,000.00	\$1,000.00

**TOTAL** **\$23,175.41**

Change in Contract Time: 15 Days

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**ITEM 7 – Additional Survey Costs**

**Description of Change:** Add pay item for additional survey needed at cost plus allowed markup. Add time for lost days of work while easement issues were resolved.

**Reason for Change:** Some infrastructure had to be re-located after the project survey and stake-out had been completed. This item reimburses the contractor for the expenses of staking out the revised location. The revisions were generally a result of negotiations for easements necessitating a change in location from the original design.

**Scope of Work:** Provide additional survey and stakeout where needed.

**Change in Contract Price:** \$3,900.00

**Change in Contract Time:** 3 Days

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**ITEM 8 – Fiber-Optic Pull Box Repair**

**Description of Change:** Repair concrete fiber-optic pull box located within easement on Dolphin Research easement

**Reason for Change:** While construction infrastructure in an easement located on Dolphin Research property, a concrete pull box for fiber-optic cable was damaged. The box was covered and since it was on private property, it was not identified when AT&T marked locations of their utilities

**Scope of Work:** Replace pull box per attached backup

**Change in Contract Price:** \$822.94

**Change in Contract Time:** 1 Day

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**ITEM 9 – Adjustment of Infrastructure to Accommodate Property Owner Changes**

**Description of Change:** Negotiated lump sum compensation for implementation of design changes to swales, drainage structures and pump stations. The lump sum amount is based on time and materials estimates. Additional contract time added for delays associated with the changed designs and the reworking efforts.

**Reason for Change:** Locations of pump stations and drainage inlets were adjusted to alleviate concerns of residents. These changes were not requested until work in front of the properties was started. The Contractor accommodated the City by stopping work to allow for field adjustments or design changes to be made. The initially disturbed areas were restored and the work performed in the revised locations. Swales were also reworked at certain locations to improve aesthetics and access issues.

**Scope of Work:** Various, as described above.



**Change in Contract Price:** \$19,377.01

**Change in Contract Time:** 21 Days

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**ITEM 10 – Bollard Modifications**

**Description of Change:** Change the quantity of bollards to be installed, include payment for installation of partially completed bollards, include payment for removal of partially completed bollards, include payment for placement of boulders and delineators, add payment for set-up of demonstration of protective alternatives, add payment for reflective tape. Negotiated lump sum based on time and materials estimates. Add days due to work and delays.

**Reason for Change:** The residents of Area 7 expressed concern about the appearance of bollards in their neighborhoods. After input from residents, Council elected to install boulders in lieu of bollards in the residential areas. Bollards are to remain in the US 1 corridor. The costs associated with these changes are tabulated below.

**Scope of Work:** See description of changes, above.

**Change in Contract Price:** \$20,946.60

**Change in Contract Time:** 35 Days

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Area 7 - Change Order No. 8 Summary			
Item No.	Description	Change in Contract Price	Change in Contract Time
1	Deduct Credit for 10" Injection Well	-\$23,341.24	0 Days
2	Deduct Credit for 150' of 18" Type B Drainage Pipe	-\$12,394.50	0 Days
3	Deduct Credit for Well Control Structure	-\$6,778.68	0 Days
4	Deduct Credit for Blue Isle Trench Patch;	-\$5,186.22	0 Days
5	Add Construction of Blue Isle Drive Asphalt	\$25,690.50	15 Days
6	46 <sup>th</sup> Street Overlay	\$23,175.41	15 Days
7	Additional Survey	\$3,900.00	3 Days
8	Fiber-Optic Pull Box Replacement	\$822.94	1 Days
9	Adjustments of Infrastructure for Property Owners	\$19,377.01	21 Days
10	Bollard Modifications	\$20,946.60	35 Days
<b>TOTAL</b>		<b>\$46,211.82</b>	<b>90 Days</b>

AREA 7 CHANGE ORDER HISTORY			
No.	Description	Change in Contract Price	Change in Contract Time
1	Contract Sum Calculation Error Correction	-\$1.07	0 Days
2	Blue Isle Blvd – 46 <sup>th</sup> St well	-\$20,456.46	60 Days
3	Gibson St. Relocate Pump Station	\$4,600.00	0 Days
4	Miscellaneous Changes	\$56,654.37	28 Days
5	Adjustment to Pipe Quantities	\$3.96	0 Days
6	Remove contaminated fill	\$35,188.22	0 Days
7	Time Extension	\$0.00	60 Days
8	Various Changes	\$46,211.82	90 Days
<b>TOTAL</b>		<b>\$122,200.84</b>	<b>238 Days</b>

Backup Documents  
for

Area 7 Sewer and Stormwater Project  
Change Order No. 8

Item No. 1

Credit for 10" Injection Well

A 10" injection well that was included in the original bid will not be used.

Item No.	Description	Current Contract QTY	Amount added or removed	QTY as adjusted by CO #8	Unit Cost	Total Change
22	10" Injection Well	1	-1	0	\$23,341.24	-\$23,341.24

Backup Documents  
for

Area 7 Sewer and Stormwater Project  
Change Order No. 8

Item No. 2

Credit for 18" Type B Drainage Pipe

Due to changes in the storm system design, 150 linear feet of 18" perforated ADS drainage pipe, Type B trench, will not be used. Reduce the quantity by 150 lf.

Item No.	Description	Current Contract QTY	Amount added or removed	QTY as adjusted by CO #8	Unit Cost	Total Change
17	18" Perforated ADS Drain, Type B	2158	-150	2008	\$82.63	-\$12,394.50

Backup Documents  
for

Area 7 Sewer and Stormwater Project  
Change Order No. 8

Item No. 3

Credit for Well Control Structure

The well control structure associated with the 10" injection well that was not installed will not be needed. Reduce the contract quantity by 1.

Item No.	Description	Current Contract QTY	Amount added or removed	QTY as adjusted by CO #8	Unit Cost	Total Change
20	Well Control Structure	12	-1	11	\$6,778.68	-\$6,778.68



Backup Documents  
for

Area 7 Sewer and Stormwater Project  
Change Order No. 8

Item No. 4

Credit for Blue Isle Trench Patch

From: erniebrown@fountainengineering.net  
Subject: RE: Area 7 additional mill & patch  
Date: December 16, 2011 9:57:00 AM EST  
To: Ed Castle <edrcastle@me.com>

1 Attachment: 6 KB

OK. Let me know

Ernie Brown  
Fountain Engineering, Inc.  
Office 305 451-6264  
Fax 305 451-2751



***Fountain Engineering, Inc.***

*"A Wisconsin Excelsior"*

----- Original Message -----

Subject: Re: Area 7 additional mill & patch  
From: Ed Castle <edrcastle@me.com>  
Date: Fri, December 16, 2011 9:51 am  
To: [erniebrown@fountainengineering.net](mailto:erniebrown@fountainengineering.net)

Roger is out of the country till after Christmas. I will check with him after that.

Serge should be forwarding paving and grading plans for 46th St. Not the part in FDOT R/W. I will do a similar spreadsheet using Area 3 unit prices. It includes some mill and patch, and some replacement of damaged concrete collars. There is also a replacement of the upper chamber of one of the old style vacuum pits. I will provide more information in the estimate that I do, so when you get the drawings, hold off until you get my spreadsheet. David also wants to meet on site and look at it.

Ed

On Dec 16, 2011, at 9:19 AM, [erniebrown@fountainengineering.net](mailto:erniebrown@fountainengineering.net) wrote:

| Ed APPROVAL FOR BLUE ISLE, BELOW

Sorry for the delay. But everything looks ok & seems to be what we agreed to in our last meeting. Do you still want to issue a work directive for this so that we don't have to wait for the next Council meeting to get started?

Ernie Brown  
Fountain Engineering, Inc.  
Office 305 451-6264  
Fax 305 451-2751  
<sigimg0.jpeg>

----- Original Message -----

Subject: Area 7 additional mill & patch  
From: Ed Castle <[edrcastle@me.com](mailto:edrcastle@me.com)>  
Date: Tue, December 13, 2011 3:22 pm  
To: Ernie Brown <[erniebrown@fountainengineering.net](mailto:erniebrown@fountainengineering.net)>  
Cc: Lori Farthing <[lfarthing@weilerengineering.org](mailto:lfarthing@weilerengineering.org)>

Ernie,

The attached spreadsheet summarizes the additional mill & patch we discussed. I added some limerock quantity where we need to supplement the base or where we need to bring up the shoulder. I used unit costs from the Area 3 contract. For the end of Blue Isle, we propose just putting in 2" of S-1 rather than trying to patch and overlay. I used 1.6 X the unit price for mill & patch to account for the extra 60% thickness of asphalt. Please review this. I would like to put it on a change order for the January 10th Council meeting.

The City also wants to add the 46th Street milling and overlay to your Area 3 contract. It includes replacing some concrete collars and replacing the upper chamber on one 3-piece vacuum pit. I will provide drawings. We have unit prices for everything from Area 3 except the upper chamber replacement.

Susie has instructed us to put the City Marina connection out to bid since we don't have a price from you yet, so you don't need to work on that.

Edward R. Castle, PE  
Weiler Engineering Corporation

Edward R. Castle, PE

Street Name	Sheet	Location	SV M&P	CY Limerock	Activity
Blue Isle	SS19A/B		633.3		Remove existing asphalt, finish 2" thick S-1 asphalt, EOP NOT OVER LANE
Crain Street	SS22	5'-40' to 8'-20"	400.0		mill 1/2" and overlay 1.5" thick
Orange Avenue	SS28	10'-75"	3.0		3'x10' mill out watermain trench and hot patch
Orange Avenue	SS25	9'-00' to 10'-00'	22.3		saw cut and remove 5 sections of EOP and hot patch - ask Louis
Lime Street	SS26		200.0		mill out 1/2" and overlay with 1" vs. 1.5" per contract
Ferriere Street/Tropical	SS27	5'-50' on Tropical	11.1		mill down bumped up existing patch to grade
Feachtree/Morton Street	SS31	0'-05' to 0'-20"	33.3	2.8	mill out and rework base if needed and hot patch before overlay in west lane
Tropical/Morton Street	SS31	0'-05' to 0'-55'	333.3	27.8	mill out from south Morton Eop at intersection, add limerock where needed, and patch
Avocado/Morton Street	SS31	0'-08' to 0'-43'	77.8		mill out gored entrance to street and patch
Morton	SS32	6'-65"	4.0		saw cut and hot patch north 1/2 of FKAA trench
Orange Avenue	SS37	1'-50' to 1'-75"	30.6	2.5	mill east lane and add limerock, prune root if needed under asphalt
Lemon Avenue	SS39	3'-70' to 5'-20"	333.3	38.9	mill out overlay and add limerock to grade (subgrade failure)
Lemon Avenue	SS39	2'-20' to 2'-55'	77.8	9.1	mill out gatering and add additional lime rock app. 4 to 5" thick in some areas to bring to grade
Tropical Avenue/Crain Street	SS41	?	69.4		intersection of Crain/Tropical needs to be milled out and go 12" either side of intersection
Tropical Avenue/Crain Street	SS41		444.4		from Crain intersection to US1 on Tropical-mill out 200' 1" thick/fall road width
Teachtree Street	SS42	10'-00-10'-35'	11.7		2 patches needed at north EOP of Morton one is approx 25'x3' and 10'x3'
Morton Street	SS43	double check	53.3		130x2' wide and 20 x2' wide saw cut and remove north EOP and patch before overlay
Dennison/Kyle			8.9		saw cut and remove radius, 4' length/width of the asphalt
Parrish	SS44	1'-70'-2'-30"	13.3		approx 60' of eastern lane on EOP needs to be saw cut approx 2' wide and hotpatched before overlay
Parrish/Goodley	SS44	9'-05' and 0'-10"	13.3		water main trenches in criss cross pattern need to be milled out and hot-patched before overlay
Parrish	SS44	5'-50' to 5'-95"	15.0		45'x3' saw cut and patch before overlay on west EOP
Bailey	SS45	0'-80' to 1'-20"	8.9		saw cut and remove asphalt and hot patch northern EOP approx. 2'x40' section
Gibson Street	SS46	approx 1'-00"	1.9	0.2	3'x3' pothole in southern lane needs to be saw cut out, add limerock, and hot patch before overlay
Gibson Street	SS46	approx. 6'-50"	11.1		mill out and add hotpatch to low spot in center of roadway
Goodley Street	SS47	approx. 3'-25"	6.7		3' wide width of roadway here need to mill and patch FKAA trench
Goodley Street	SS47	6'-50'-8'-50"	22.2		saw cut, remove, and hot patch southern EOP approx. 1' wide x200 feet long
Banana Road	SS49	13'-00 to 17'-00'	88.9	29.6	saw cut and remove asphalt, rework base to extend 2' beyond EOP then add lime rock shoulder with an 8:1 slope

Total 2275.0  
 Total + 10% 2500.0  
 Cost of M&P \$59,475.00  
 Blue Isle \$20,804.28

**Total Change Order w Blue Isle \$86,677.08**

Blue Isle Overlay will not be made in overlay process.

*ITEM BY CREDIT*

Blue Isle 2" of S-1 \$25,690.50  
 Credit for Blue Isle M&P -\$5,186.22  
 Blue Isle Net Change \$20,504.28

Blue Isle Mill & Patch Estimate

186.7	Gravity main trench, 4' wide X 420' long
21.0	Patching for manhole excavations, 3' X 7' SY each
10.7	Patching for 6' laterals 4 ea X 3' wide X 8' long
218.3	

Backup Documents  
for

Area 7 Sewer and Stormwater Project  
Change Order No. 8

Item No. 5

Add Construction of Blue Isle Trench Patch



our last meeting. Do you still want to issue a work directive for this so that we don't have to wait for the next Council meeting to get started?

Ernie Brown  
Fountain Engineering, Inc.  
Office 305 451-6264  
Fax 305 451-2751  
<sigimg0.jpeg>

----- Original Message -----

Subject: Area 7 additional mill & patch  
From: Ed Castle <[edrcastle@me.com](mailto:edrcastle@me.com)>  
Date: Tue, December 13, 2011 3:22 pm  
To: Ernie Brown <[erniebrown@fountainengineering.net](mailto:erniebrown@fountainengineering.net)>  
Cc: Lori Farthing <[lfarthing@weilerengineering.org](mailto:lfarthing@weilerengineering.org)>

Ernie,

The attached spreadsheet summarizes the additional mill & patch we discussed. I added some limerock quantity where we need to supplement the base or where we need to bring up the shoulder. I used unit costs from the Area 3 contract. For the end of Blue Isle, we propose just putting in 2" of S-1 rather than trying to patch and overlay. I used 1.6 X the unit price for mill & patch to account for the extra 60% thickness of asphalt. Please review this. I would like to put it on a change order for the January 10th Council meeting.

The City also wants to add the 46th Street milling and overlay to your Area 3 contract. It includes replacing some concrete collars and replacing the upper chamber on one 3-piece vacuum pit. I will provide drawings. We have unit prices for everything from Area 3 except the upper chamber replacement.

Susie has instructed us to put the City Marina connection out to bid since we don't have a price from you yet, so you don't need to work on that.

Edward R. Castle, PE  
Weiler Engineering Corporation

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Edward R. Castle, PE  
Weiler Engineering Corporation

Street Name	Sheet	Location	SY M&P	CY Limerock	Activity
Blue Isle	SS19A,B		653.3		Remove existing asphalt, install 2" type S-1 asphalt, (DO NOT OVERLAY)
Crain Street	SS22	5+40' to 8+20'?	400.0		mill 1/2" and overlay 1.5" thick
Orange Avenue	SS25	10+75'	3.3		3'x10' mill out watermain trench and hot patch
Orange Avenue	SS25	9+00' to 10+00'	22.2		saw cut and remove 5 sections of EOP and hot patch-ask Louis
Lime Street	SS26		200.0		mill out 1/2" and overlay with 1" vs. 1.5" per contract
Ferriere Street/Tropical	SS27	5+50' on Tropical	11.1		mill down humped up existing patch to grade
Peachtree/Morton Street	SS31	0+05' to 0+30'	33.3	2.8	mill out and rework base if needed and hot patch before overlay in west lane
Tropical/Morton Street	SS31	0+05' to 0+55'	333.3	27.8	mill out from south Morton Eop at intersection, add limerock where needed, and patch
Avocado/Morton Street	SS31	0+08' to 0+43'	77.8		mill out gated entrance to street and patch
Morton	SS32	6+65'	4.0		saw cut and hot patch north 1/2 of FKA trench
Orange Avenue	SS37	1+50' to 1+75'	30.6	2.5	mill east lane and add lime rock, prune root if needed under asphalt
Lemon Avenue	SS39	3+70' to 5+20'	333.3	38.9	mill out overlay and add limerock to grade (subgrade failure)
Lemon Avenue	SS39	2+20' to 2+55'	77.8	9.1	mill out gatering and add additional lime rock app. 4 to 5" thick in some areas to bring to grade
Tropical Avenue/Crain Street	SS41	?	69.4		intersection of Crain/Tropical needs to be milled out and go 12" either side of intersection
Tropical Avenue/Crain Street	SS41		444.4		from Crain intersection to US1 on Tropical-mill out 200' 1" thick x full road width
Peachtree Street	SS42	10+00-10+35'	11.7		2 patches needed at north EOP of Morton one is approx. 25'x3' and 10'x3'
Morton Street	SS43	double check	33.3		130x2' wide and 20'x2' wide saw cut and remove north EOP and patch before overlay
Dennison/Kyle			8.9		saw cut and remove radius 4' length x width of the asphalt
Farrish	SS44	1+70'-2+30'	13.3		approx 60' of eastern lane on EOP needs to be saw cut approx. 2' wide and hotpatched before overlay
Farrish/Goodley	SS44	9+05' and 0+10'	13.3		water main trenches in criss cross pattern need to be milled out and hot-patched before overlay
Parrish	SS44	5+50' to 5+95'	15.0		45'x3' saw cut and patch before overlay on west EOP
Bailey	SS45	0+80' to 1+20'	8.9		saw cut and remove asphalt and hot patch northern EOP approx. 2' x 40' section
Gibson Street	SS46	approx 1+00'	1.0	0.2	3'x3' pothole in southern lane needs to be saw cut out, add limerock, and hot patch before overlay
Gibson Street	SS46	approx. 6+50'	11.1		mill out and add hotpatch to low spot in center of roadway
Goodley Street	SS47	approx. 3+25'	6.7		3' wide x width of roadway here need to mill and patch FKA trench
Goodley Street	SS47	6+50'-8+50'	22.2		saw cut, remove, and hot patch southern EOP approx. 1' wide x 200 feet long
Banana Road	SS49	13+00 to 17+00'	88.9	29.6	saw cut and remove asphalt, rework base to extend 2' beyond EOP then add lime rock shoulder with an 8:1 slope

Total	2275.0	110.9	
Total + 10%	2500.0	122.0	CY of Limerock
Cost of M&P	\$59,475.00	\$6,697.80	Cost of Limerock
Blue Isle	\$20,504.28		

**Total Change Order w Blue Isle \$86,677.08**

Credit for Blue Isle Overlay will not be paid to overlay project \$5,631.73

Blue Isle 2" of S-1 **\$25,690.50**  
 Credit for Blue Isle M&P -\$5,186.22  
 Blue Isle Net Change \$20,504.28

**Blue Isle Mill & Patch Estimate**

186.7	Gravity main trench, 4' wide X 420' long
21.0	Patching for manhole excavations, 3 X 7 SY each
10.7	Patching for 6" laterals 4 ea X 3' wide X 8' long

218.3

*ITEM #3 COST*



Backup Documents  
for

Area 7 Sewer and Stormwater Project  
Change Order No. 8

Item No. 6

46<sup>th</sup> Street Asphalt Overlay



Ed Castle <edrcastle@me.com>

46th St overlay

December 27, 2011 2:03 PM

Ernie,

Take a look at the attached estimate for 46th Street. You should have the drawings from Serge already. I used unit costs from Area 3 except for the vacuum pit upper chamber, and I put in an extra \$1000 for the additional elevation shots needed. Please let me know if this works. If I don't hear otherwise by tomorrow mid-day, I will use these numbers to place this in the Area 7 change order.

  
  
[46th St over...xlsx \(10 KB\)](#)

Edward R. Castle, PE  
Weiler Engineering Corporation

*No response from ERNIE, IMPLIED CONSENT*

45th Street Overlay and Misc Repairs

Item	Units	Qty	Unit \$	Total \$
Overlay, 1" Type S-III Asphalt	SY	1100	\$10.98	\$12,078.00
Mill & Patch, 1.5" Type S-I Asphalt	SY	140	\$23.79	\$3,330.60
Asphalt Levling Course	Ton	25	\$146.38	\$3,659.50
Limerock, Avg 3" thick	SY	25	\$15.56	\$389.00
Replace concrete collar, Vac Pit	Ea	4	\$244.45	\$977.80
Repalce concrete collar, cleanout	Ea	2	\$121.78	\$243.56
Replace concrete collar, storm inelt	Ea	1	\$247.95	\$247.95
Replace upper chamber, vac pit (City materials)	Ea	1	\$1,249.00	\$1,249.00
Additional Construction elevatioins, grade pins as needed	LS	1	\$1,000.00	\$1,000.00

**TOTAL**

**\$23,175.41**

*item # & COST*

Backup Documents  
for

Area 7 Sewer and Stormwater Project  
Change Order No. 8

Item No. 7

Additional Survey Costs

# FOUNTAIN ENGINEERING, INC.

48 Coral Way, Unit A Key Largo, FL 33037

Phone: 305 451-6264 Fax: 305 451-2751

Weiler Engineering Inc

September 17, 2010

6805 Overseas Highway

Marathon, Fl. 33050

RE: City of Marathon Sewer & Storm Water Area 7

Additional survey Work

Attn: Ed Castle

Sir I have listed the additional work performed by our surveyor on the above referenced project

Invoice # 3118 is for the revised easement to service Vahalia Point. Included is the easement from the plans and the revised easement provided by Weiler Engineering.

Invoice #3125 is for the revised easement DB-028-8 or known as Fraelich. Included is the easement from the project plans and the revised easement provided by Weiler Engineering.

Invoice #3132 is for the revised location of DB-013-2, DB-013-3, DB-013-4, and DB-013-5

Invoice #3136 is for the Baseline 7 Benchmarks on 46<sup>th</sup> Street. This was additional unit quantity work added under change order 2 & 4

MJC # 3118	\$ 750.00
MJC # 3125	\$ 1,000.00
MJC # 3132	\$ 1,000.00
MJC # 3136	\$ 500.00
Subtotal	\$ 3,250.00
Fountain Engineering Markup	\$ 650.00
Extra Surveying Cost billed	\$ 3,900.00

Sincerely

Gregory Hoch

*MJC Group, Inc.*

**INVOICE**

1865 NW 124 Way  
Coral Springs, FL. 33071

INVOICE # 3118  
DATE: MARCH 19, 2011

954-753-0975  
954-753-0543 (Fax)

BILL TO Fountain Engineering, Inc.  
P.O. Box 700457  
Miami, Florida 33170

COMMENTS

DATE	DESCRIPTION				BALANCE	AMOUNT
	Marathon Area 7 / Grassy Key *** ADDITIONAL CHARGE *** Stake Easement / Ocean Dr. <i>Hd0 T.11 Next month 6/1</i>					\$750.00
	CURRENT	1-30 DAYS PAST DUE	31-60 DAYS PAST DUE	61-90 DAYS PAST DUE	OVER 90 DAYS PAST DUE	AMOUNT DUE
						\$750.00

REMITTANCE
INVOICE # 3118
Date 3/19/11
Amount Due \$750.00
Amount Enclosed

**ENTERED 3-19-11**

*MJC Group, Inc.*

**INVOICE**

1865 NW 124 Way  
Coral Springs, FL. 33071

INVOICE # 3125  
DATE: MARCH 22, 2011

954-753-0975  
954-753-0543 (Fax)

BILL TO Fountain Engineering, Inc.  
P.O. Box 700457  
Miami, Florida 33170

COMMENTS

DATE	DESCRIPTION	BALANCE	AMOUNT		
	Marathon Area 7 / Grassy Key *** ADDITIONAL CHARGE *** Stake Easement / Fraelich, Beck, Bird) Field & Office		\$1000.00		
CURRENT	1-30 DAYS PAST DUE	31-60 DAYS PAST DUE	61-90 DAYS PAST DUE	OVER 90 DAYS PAST DUE	AMOUNT DUE
					\$1000.00

REMITTANCE
INVOICE # 3125
Date 3/22/11
Amount Due \$1000.00
Amount Enclosed

Make all checks payable to MJC Group, Inc.

Extra

MJC Group, Inc.

INVOICE

1865 NW 124 Way  
Coral Springs, FL. 33071

INVOICE # 3132  
DATE: APRIL 13, 2011

954-753-0975  
954-753-0543 (Fax)

BILL TO Fountain Engineering, Inc.  
P.O. Box 700457  
Miami, Florida 33170

COMMENTS

DATE	DESCRIPTION	BALANCE	AMOUNT		
	Marathon Area 7 / Grassy Key  Re-Stake (Relocation) DB 13-2, DB 13-3, DB 13-4, DB 13-5		\$1000.00		
CURRENT	1-30 DAYS PAST DUE	31-60 DAYS PAST DUE	61-90 DAYS PAST DUE	OVER 90 DAYS PAST DUE	AMOUNT DUE
					\$1000.00

REMITTANCE
INVOICE # 3132
Date 4/13/11
Amount Due \$1000.00
Amount Enclosed

Make all checks payable to MJC Group, Inc.



# MJC Group, Inc.

# INVOICE

1865 NW 124 Way  
Coral Springs, FL. 33071

INVOICE # 3136  
DATE: MAY 6, 2011

954-753-0975  
954-753-0543 (Fax)

BILL TO Fountain Engineering, Inc.  
P.O. Box 700457  
Miami, Florida 33170

COMMENTS

DATE	DESCRIPTION	BALANCE	AMOUNT		
	Marathon Area 4  Set Baseline Stations & Benchmark Set CL Structures S 172 A & S 173 & offsets		\$500.00		
CURRENT	1-30 DAYS PAST DUE	31-60 DAYS PAST DUE	61-90 DAYS PAST DUE	OVER 90 DAYS PAST DUE	AMOUNT DUE
					\$500.00

REMITTANCE
INVOICE # 3136
Date 5/6/11
Amount Due \$500.00
Amount Enclosed


Make all checks payable to MJC Group, Inc.

Backup Documents  
for

Area 7 Sewer and Stormwater Project  
Change Order No. 8



Item No. 8

Fiber-Optic Pull Box Repair

Ed Castle <edrcastle@me.com>   
Dolphin Research Fiber-Optic revised cost  
December 28, 2011 2:14 PM

Ernie,

The estimate provided by Greg had incorrect labor rates (the cost + 20% + 10% rate, but with rounded numbers). And then the labor was marked up 20% again in the spreadsheet. I have attached a corrected spreadsheet. Unless you disagree, this will be the cost I use in the change order.

  
  
[Fiber-Optic...xlsx \(10 KB\)](#)

Edward R. Castle, PE  
Weiler Engineering Corporation

Revised Dolphin Research Fiber-optic pull box repair  
 12/28/2011

<b>Description</b>	<b>Qty</b>	<b>Unit Cost</b>	<b>Total</b>
Concrete pull box, each	1.00	\$346.69	\$346.69
Bag concrete mix	5.00	\$5.38	\$26.90
Reinforcing steel, lbs	3.00	\$2.48	\$7.44
Trenching, linear feet	12.00	\$8.12	\$97.44
Density testing, each	1.00	\$50.00	\$50.00
Skilled Labor, hours	4.00	\$17.62	\$70.48
Unskilled labor, hours	9.00	16.42	\$147.78
Materials SubTotal			\$381.03
Markup, 20% on materials only			\$76.21
Materials + Markup Subtotal			\$457.24
Labor and Equipment Subtotal			\$365.70
		<b>TOTAL</b>	<b>\$822.94</b>

Backup Documents  
for

Area 7 Sewer and Stormwater Project  
Change Order No. 8

Item No. 9

Adjustment of Infrastructure for Property Owners

Various changes were made throughout the project to accommodate requests of property owners. The changes were generally made as field adjustment that occurred after the Contractor had mobilized and begun working. This caused delays and associated demobilization from the site, return mobilization to the property, restoration of any previously disturbed areas and then performing the changes work. In the case of minor adjustments where demobilization was not needed, the delay was less significant but still resulted in additional expense to the Contractor.

These types of expenses are compensable under the terms of the construction documents. Based on the varying circumstances and conditions, lump sum compensation was negotiated based on the estimated time and materials expenses incurred by the Contractor. The markups and hourly rates as agreed upon in the Fountain Area 3 Time and Materials change order were used to generate the lump sum amount of \$19,377.01.

Backup Documents  
for

Area 7 Sewer and Stormwater Project  
Change Order No. 8

Item No. 10

Bollard Modifications

The residents of Area 7 expressed concern about the appearance of bollards in their neighborhoods. After input from residents, Council elected to install boulders in lieu of bollards in the residential areas. Bollards are to remain in the US 1 corridor.

The work involved in accommodating the desires of the property owners and the Council created a change scope of work including: Set-up of demonstration of protective alternatives, changes in the quantity of bollards to be installed, and work associated with the installation of partially completed bollards, removal of partially completed bollards, placement of boulders, delineators and reflective tape.

These types of expenses are compensable under the terms of the construction documents. Based on the varying circumstances and conditions, lump sum compensation was negotiated based on the estimated time and materials expenses incurred by the Contactor. The markups and hourly rates as agreed upon in the Fountain Area 3 Time and Materials change order were used to generate the lump sum amount of \$20,946.60.