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## CHANGE ORDER

### Distribution:

- ☐ FBC Engineering
- ☐ FBC Judge
- ☐ FBC Purchasing
- ☐ Contractor
- ☐ Consultant

## FORT BEND COUNTY ENGINEERING

P. O. Box 1449  
1124 Blume Rd.  
Rosenberg, Texas 77471  
Phone: 281-633-7510  
Fax: 281-342-7366  
Web site: [www.co.fort-bend.tx.us](http://www.co.fort-bend.tx.us)

PROJECT : IMPROVEMENTS TO KATY GASTON ROAD  
(name, address): FROM FM 1093 TO CINCO RANCH BLVD

CHANGE ORDER NUMBER: 02  
DATE: 05-04-2010  
PROJECT NUMBER: MOBILITY #733  
CONTRACT FOR: \$2,623,614.78  
CONTRACT DATE: 01-16-2010  
FBC PURCHASE ORDER NO. 44825

CONTRACTOR: ALLGOOD CONSTRUCTION CO., INC.  
(name, address): 2647 JOANN STREET  
STAFFORD, TX 77477

The contract is changed as follows:

Based on site conditions and geotechnical recommendation (see attached Geotech Engineering and Testing letter dated 04-26-10) for stabilized subgrade, fly ash material will need to be added to the contract as listed below-

### ADD-

1,030 Tons	Fly Ash Material for pavement subgrade	\$55.00 / Ton	\$56,650.00
54,167 SY	Subgrade manipulation for fly ash	\$ 1.44 / SY	\$78,000.48

### DEDUCT-

845 Tons	Lime Slurry Material for pavement subgrade	\$140.17 / Ton	(\$118,443.65)
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\*ALL WORK WILL BE DONE IN ACCORDANCE WITH HARRIS COUNTY SPECIFICATION NO. 223 - "Lime-Flyash or Flyash Stabilized Subgrade" - Dated 11/01/2008.

**TOTAL: \$16,206.83**

### Not valid until signed by Fort Bend County and Contractor.

The Original (Contract Sum) ..... \$ 2,623,614.78

Net change by previously authorized Change orders ..... \$ 86,604.98

The (Contract Sum) Prior to this Change Order was ..... \$ 2,710,219.76

The (Contract Sum) will be (increased) (decreased) (unchanged)  
by this Change Order in the amount of ..... \$ 16,206.83

The new (Contract Sum) including this Change Order will be ..... \$ 2,726,426.59

The Contract Time will be (increased)(decreased)(unchanged) by 0 days

The Date of Substantial Completion as of this Change Order therefore is (changed)(unchanged) to 11-15-2010

Fort Bend County Engineering  
Louis E. Hood, P.E.

P. O. Box 1449  
Rosenberg, Texas 77471

By:   
(signature)

DATE:

### Authorized:

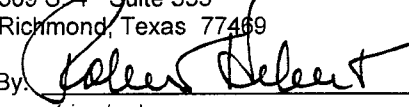
CONTRACTOR:  
ALLGOOD CONSTRUCTION CO., INC.  
Address: 2647 JOANN STREET  
STAFFORD, TX 77477

By:   
(signature)

DATE: 05-04-2010

Fort Bend County Judge

Honorable Robert E. Hebert  
309 S. 4<sup>th</sup> Suite 355  
Richmond, Texas 77469

By:   
(signature)

DATE: 6-1-2010

6-2-10 copy received



# GEOTECH ENGINEERING and TESTING



ACCREDITED  
CERTIFICATE #0075-01  
#0075-02

Geotechnical • Environmental • Construction Materials • Forensic Engineering (Firm PE # F-1183)  
800 Victoria Drive • Houston, Texas 77022-2908 • Tel.: 713-699-4000 • Fax: 713-699-9200 • Website: www.geotecheng.com

Fort Bend County  
c/o Schaumburg and Polk, Inc.  
11767 Katy Freeway, Ste. 900  
Houston, Texas 77079

Date: 04-26-10  
Project No.: 10-2033  
Report No. 18

Attention: Mr. Nathan King

Subject: Subgrade stabilization for Improvements to Katy Gaston Road from FM 1093 to Cinco Ranch Blvd. Fort Bend County (Project 10-041)

Gentlemen:

Submitted here is our report on the evaluation of subgrade stabilization for pavement at the above referenced project site. We understand that concrete paving will be used on this project. Three samples of subgrade soil (existing) were obtained for determination of stabilizer. The test results on the raw samples are as follows:

Sample Location	Liquid Limit	Plastic Limit	Plasticity Index	Passing #200 Sieve	Classification ASTM D 2487
Katy Gaston, sta. 92+75	26	15	11	54	Gray silty clay
Katy Gaston, sta. 89+27	24	14	10	57	Grayish clay sand
Katy Gaston, sta. 83+90	25	15	10	51	Grayish clay sand

Based on laboratory test results, the subgrade soils at the above referenced project are classified as grayish clay sand with P.I.'s ranging from 10 to 11 and require stabilization.

Our Recommendation for subgrade stabilization in the pavement area and the amounts of stabilizer for pavement subgrade is as follows:

Stabilizer	ASTM C977 Percentage %	Quantity lb/yd <sup>2</sup> for 6-inch compacted thickness
Lime	2	12
Fly ash	7	38

Harris County standard specification should be used for placing and mixing the stabilizer.

The subgrade areas should be proofrolled with a loaded dump truck, scraper, or similar pneumatic-tired equipment. The proofrolling serves to compact surficial soils and to detect any soft or loose zones. Any soils deflecting excessively under moving loads should be undercut to firm soils and recompacted. The proofrolling operations should be observed by an experienced geotechnician.

The subgrade soils should be stabilized to a depth of six-inches. These soils should be compacted to a minimum of 95 percent of standard proctor density (ASTM D 698) at optimum moisture content ( $\pm 2\%$ ).

Our letter and reports are for the exclusive use of the client to whom they are addressed. The use of our name must receive our prior written approval. Our letters and reports apply only to the sample tested and/or inspected and are not necessarily indicative of the quantities of apparently identical or similar products.

The subcontractor who will be doing the stabilization should be experienced with stabilization procedures and methods. Furthermore, all of the earthwork should be monitored by our technician to assure compliance with the project specifications.

We appreciate the opportunity to be of service. Please call there should be any questions.

Very truly yours,

GEOTECH ENGINEERING AND TESTING

Fred Ehteshami, P.E.  
Construction Materials Engineering Manager

FE/lds

**From:** Nathan King <nking@spi-eng.com>  
**To:** "Rudd, Michael" <Michael.Rudd@jacobs.com>  
**CC:** Pete Ring <pring@spi-eng.com>, Roy Rodriguez <roy@allgoodconst.com>, <we...  
**Date:** 4/28/2010 5:05 PM  
**Attachments:** Katy Gaston Pavement Subgrade Recommendation.pdf

Mike,

We already discussed this on the phone, but I want to follow up with a summary. I am checking into your question regarding the number of proctor samples to be taken on the job...I will get back with you on that.

The contract originally calls for a 6" lime stabilized subgrade, stabilized at 8%.

GeoTech Engineering and Testing, the materials testing lab for this job, recommended 2% lime and 7% fly ash stabilization. I have attached GeoTech's recommendation which was prepared by Mr. Fred Ehteshami, P.E. When I spoke to Fred he mentioned that because the PI levels in the soil were in the 10-11 range, and because it was a sandy soil, that lime stabilization alone would not work.

The recommendation from GeoTech did not match the original recommendation from QC Laboratories found in the Geotechnical Report and I spoke with Ray Meyer at QC Laboratories regarding the discrepancies. I told Ray about GeoTech's recommendations, as outlined above, and he agreed that the 2%/7% stabilization was appropriate based on that information and also that a 6" subgrade would be just fine.

Mark Dessens and Pete Ring agreed that since QC Laboratories had concurred with GeoTech's recommendation, and that the new stabilization should be approved for use by AllGood.

Since there is no bid item for fly ash, Nathan Hatcher would like AllGood to write a change order and submit it to him for his review.

Please let me know if you have any questions,

Thanks,

Nathan B. King, EIT

Project Engineer

Schaumburg and Polk, Inc.

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