



November 25, 2020

Commissioner Ellie Torres
Attn: Velinda Reyes
Hidalgo County, Pct. #4
1051 N. Doolittle Road
Edinburg, Texas 78542

RE: Hidalgo County Bus Barn

Dear Ms. Reyes:

Included for your use with this letter are test reports **R005 thru R008-28** for **Field Density and Concrete Compression Testing** performed on the above referenced project. As noted on our reports NOT all test results met project requirements. Contractor will be billed for Failed Density Testing. Also included for your use, is an invoice for the services provided.

L&G Engineering appreciates the opportunity to serve your material testing needs on this project and we look forward to working with you in the future.

If you have any questions, feel free to contact me at 956-565-0760.

Sincerely,

Ricardo Gallaga, P.E.
General Manager

Attachments

cc: Hidalgo County Pct. #4 – Attn: Velinda Reyes
Half Associates, Inc. Attn: Raul Garcia, Jr. P.E., CFM
Celso Gonzalez Construction, Inc. Attn: Celso Gonzalez Jr.- President

2100 W. Expressway 83
 Mercedes, TX 78570
 Office (956) 565-0760 Fax (956) 565-6746

Client Address: Hidalgo County Pct. #4
 Velinda Reyes
 1051 N. Doolittle Rd.
 Edinburg, TX. 78542 USA

Account No.: E130
 Project No: E130201
 Project Desc.: Hidalgo County Sheriff's Bus Barn

Due Date: UPON RECEIPT
 Budget/Remaining: \$5,509.18 / \$2,228.61

===== Invoice Summary by Billing Code =====

	<u>Unit Rate</u>	<u>Qty</u>	<u>Extension</u>
910:91011 - Field Density (Nuclear Method)	\$25.37	5.00	\$126.85
920:92034 - Comp. Strength of Cyl. Specimen	\$29.62	4.00	\$118.48
920:92035 - Cyl. Specimen Prep./Hold/Cure	\$29.62	1.00	\$29.62
940:94047 - Eng. Tech. (Concrete / Lab)	\$58.20	1.00	\$58.20
940:94048 - Eng. Tech. (Soils / SP.)	\$58.20	2.00	\$116.40
940:94050 - Eng. Tech. (Concrete)	\$58.20	6.50	\$378.30
940:94054 - Engineering Lab Manager	\$116.40	0.50	\$58.20
950:95058 - Vehicle Trip Charge	\$0.54	192.00	\$103.68
950:95060 - Admin/Clerical	\$58.20	1.25	\$72.75
950:95061 - Test Report	\$25.03	4.00	\$100.12
			<hr/> <hr/>
Total for this Invoice:			\$1,162.60

===== Invoice Detail by Report =====

<u>Report No.</u>	<u>Sampled</u>	<u>Qty</u>	<u>Billing Code</u>	<u>Unit Type</u>	<u>Unit Rate</u>	<u>Extension</u>
R005	10/27/2020	1.00	910:91011 - Field Density (Nuclear Method)	Each	\$25.37	\$25.37
R005	10/27/2020	0.25	950:95060 - Admin/Clerical	Hour	\$58.20	\$14.55
R005	10/27/2020	1.00	950:95061 - Test Report	Each	\$25.03	\$25.03
			Sample Date: 10/27/2020	Report Number R005 for a Subtotal of:		<hr/> <hr/>
						\$64.95
R006	11/04/2020	4.00	910:91011 - Field Density (Nuclear Method)	Each	\$25.37	\$101.48
R006	11/04/2020	2.00	940:94048 - Eng. Tech. (Soils / SP.)	Hour	\$58.20	\$116.40
R006	11/04/2020	0.25	940:94054 - Engineering Lab Manager	Hour	\$116.40	\$29.10

REMIT TO: 2100 W. Expressway 83
 Mercedes, TX 78570
 Office (956) 565-0760 Fax (956) 565-6746

Net 30 Days

**PAST DUE BALANCES SUBJECT TO 1.5% SERVICE CHARGE PER MONTH
 PLEASE REFERENCE INVOICE NUMBER WITH PAYMENT**

2100 W. Expressway 83
 Mercedes, TX 78570
 Office (956) 565-0760 Fax (956) 565-6746

===== Invoice Detail by Report =====

<u>Report No.</u>	<u>Sampled</u>	<u>Qty</u>	<u>Billing Code</u>	<u>Unit Type</u>	<u>Unit Rate</u>	<u>Extension</u>
R006	11/04/2020	64.00	950:95058 - Vehicle Trip Charge	Mile	\$0.54	\$34.56
R006	11/04/2020	0.25	950:95060 - Admin/Clerical	Hour	\$58.20	\$14.55
R006	11/04/2020	1.00	950:95061 - Test Report	Each	\$25.03	\$25.03
			Sample Date: 11/04/2020	Report Number R006 for a Subtotal of:		\$321.12
R007	10/08/2020	1.00	920:92035 - Cyl. Specimen Prep./Hold/Cure	Each	\$29.62	\$29.62
R007	10/08/2020	6.50	940:94050 - Eng. Tech. (Concrete)	Hour	\$58.20	\$378.30
R007	10/08/2020	0.25	940:94054 - Engineering Lab Manager	Hour	\$116.40	\$29.10
R007	10/08/2020	128.00	950:95058 - Vehicle Trip Charge	Mile	\$0.54	\$69.12
R007	10/08/2020	0.25	950:95060 - Admin/Clerical	Hour	\$58.20	\$14.55
R007	10/08/2020	1.00	950:95061 - Test Report	Each	\$25.03	\$25.03
			Sample Date: 10/08/2020	Report Number R007 for a Subtotal of:		\$545.72
R008-28	10/08/2020	4.00	920:92034 - Comp. Strength of Cyl. Specimen	Each	\$29.62	\$118.48
R008-28	10/08/2020	1.00	940:94047 - Eng. Tech. (Concrete / Lab)	Each	\$58.20	\$58.20
R008-28	10/08/2020	0.50	950:95060 - Admin/Clerical	Hour	\$58.20	\$29.10
R008-28	10/08/2020	1.00	950:95061 - Test Report	Each	\$25.03	\$25.03
			Sample Date: 10/08/2020	Report Number R008-28 for a Subtotal of:		\$230.81
Total for this Invoice:						\$1,162.60

REMIT TO: 2100 W. Expressway 83
 Mercedes, TX 78570
 Office (956) 565-0760 Fax (956) 565-6746

Budget: \$5,509.18
 Prev Inv: \$2,117.97
 This Inv: \$1,162.60
 Balance: \$2,228.61

Net 30 Days

PAST DUE BALANCES SUBJECT TO 1.5% SERVICE CHARGE PER MONTH
 PLEASE REFERENCE INVOICE NUMBER WITH PAYMENT

FIELD DENSITIES TEST REPORT

Project Description: Hidalgo County Sheriff's Bus Barn
Client: Hidalgo County Pct. #4
Engineer: Halff & Associates, Inc.
Contractor: Celso Gonzalez Construction, Inc.

L&G Project Number: E130201
L&G Report Number: R005
Sample Date: 10/27/2020
Date Reported: 10/27/2020

Page 1 of 2

Material Description	Subgrade		
Required % Proctor	95	Moisture Tolerance	-2+3
	Proctor No	Optimum % Moisture	Opt. Density, LB/CF
	IS MD 1	11.9	117.0

Test No.	Test Location	Proctor No	Moisture Content	Dry Density	Percent Compaction	6
1	Building Pad 25' E. & 20' S. of NW Corner	IS MD 1	10.2%	102.8 pcf	87.9% (Fail)	6"
2	Building Pad 20' S. & 20' W. of NE Corner	IS MD 1	15.0%	106.7 pcf	91.2% (Fail)	6"
3	Building Pad 40' E. & 20' S. of NW Corner	IS MD 1	9.2%	113.4 pcf	96.9% (Fail)	6"
4	Building Pad 20' E. & 20' S. of NW Corner	IS MD 1	10.4%	107.1 pcf	91.5% (Fail)	6"
5	Building Pad 38' E. & 35' S of NW Corner	IS MD 1	13.2%	110.5 pcf	94.4% (Fail)	6"
6	Building Pad 42' W & 20' S of NE Corner	IS MD 1	10.1%	103.6 pcf	88.6% (Fail)	6"
7	Building Pad 22' E. & 20' S of NE Corner	IS MD 1	11.2%	111.3 pcf	95.1% (Pass)	6"
8	Building Pad 22' E. & 15' S of NE Corner	IS MD 1	10.9%	103.4 pcf	88.4% (Fail)	6"

Orig: Hidalgo County Pct. #4 (E130) (Hidalgo County Pct. #4)
 (Edinburg, TX) Attn: Maria Lucio
 (1-cc copy)
 1-cc Halff & Associates, Inc.
 Attn: Robert L. Saenz, PE, CFM, PMP
 1-cc Celso Gonzalez Construction, Inc.
 Attn: Celso Gonzalez
 1-cc Laboratory

Respectfully Submitted,
 L&G Engineering



Ricardo Gallaga, P.E, Project Manager

FIELD DENSITIES TEST REPORT

Project Description: Hidalgo County Sheriff's Bus Barn
Client: Hidalgo County Pct. #4
Engineer: Halff & Associates, Inc.
Contractor: Celso Gonzalez Construction, Inc.

L&G Project Number: E130201
L&G Report Number: R005
Sample Date: 10/27/2020
Date Reported: 10/27/2020

Page 2 of 2

Test No.	Test Location	Proctor No	Moisture Content	Dry Density	Percent Compaction	6
9	Driveway to Building Pad 40' W. & 15' S of NE Corner of Building Pad	IS MD 1	9.7%	116.5 pcf	99.6% (Fail)	6"
10	Driveway 25' E. & 8' S of SW Corner of Building Pad	IS MD 1	8.7%	115.3 pcf	98.6% (Fail)	6"
11	Driveway 25' E & 8' S of SW Corner of Building Pad	IS MD 1	10.0%	113.4 pcf	96.9% (Fail)	6"

Remarks: Test results are NOT In general compliance with the project specifications, RE-TESTS will be coordinated.

Test Methods: ASTM D2922, D3017

Orig: Hidalgo County Pct. #4 (E130) (Hidalgo County Pct. #4)
 (Edinburg, TX) Attn: Maria Lucio
 (1-cc copy)
 1-cc Halff & Associates, Inc.
 Attn: Robert L. Saenz, PE, CFM, PMP
 1-cc Celso Gonzalez Construction, Inc.
 Attn: Celso Gonzalez
 1-cc Laboratory

Respectfully Submitted,
L&G Engineering



Ricardo Gallaga, P.E, Project Manager

FIELD DENSITIES TEST REPORT

Project Description: Bus Barn
Client: Celso Gonzalez Construction, Inc.
Engineer: Halff & Associates, Inc.
Contractor: Celso Gonzalez Construction, Inc.

L&G Project Number: E130201-1
L&G Report Number: R005-1
Sample Date: 10/27/2020
Date Reported: 11/11/2020


Page 1 of 2

Material Description	Subgrade		
Required % Proctor	95	Moisture Tolerance	-2+3
	<u>Proctor No</u>	<u>Optimum % Moisture</u>	<u>Opt. Density, LB/CF</u>
	IS MD 1	11.9	117.0

Test No.	Test Location	Proctor No	Moisture Content	Dry Density	Percent Compaction	6
1	Building Pad 25' E. & 20' S. of NW Corner	IS MD 1	10.2%	102.8 pcf	87.9% (Fail)	6"
2	Building Pad 20' S. & 20' W. of NE Corner	IS MD 1	15.0%	106.7 pcf	91.2% (Fail)	6"
3	Building Pad 40' E. & 20' S. of NW Corner	IS MD 1	9.2%	113.4 pcf	96.9% (Fail)	6"
4	Building Pad 20' E. & 20' S. of NW Corner	IS MD 1	10.4%	107.1 pcf	91.5% (Fail)	6"
5	Building Pad 38' E. & 35' S of NW Corner	IS MD 1	13.2%	110.5 pcf	94.4% (Fail)	6"
6	Building Pad 42' W & 20' S of NE Corner	IS MD 1	10.1%	103.6 pcf	88.6% (Fail)	6"
7	Building Pad 22' E. & 20' S of NE Corner	IS MD 1	11.2%	111.3 pcf	95.1% (Pass)	6"
8	Building Pad 22' E. & 15' S of NE Corner	IS MD 1	10.9%	103.4 pcf	88.4% (Fail)	6"

Orig: Celso Gonzalez Construction, Inc.
 (Mission, TX) Attn: Celso Gonzalez
 (1-cc copy)
 1-cc Halff & Associates, Inc.
 Attn: Robert L. Saenz, PE, CFM, PMP
 1-cc Celso Gonzalez Construction, Inc.
 Attn: Celso Gonzalez
 1-cc Laboratory

Respectfully Submitted,
 L&G Engineering



Ricardo Gallaga, P.E., Project Manager

FIELD DENSITIES TEST REPORT

Project Description: Bus Barn
Client: Celso Gonzalez Construction, Inc.
Engineer: Halff & Associates, Inc.
Contractor: Celso Gonzalez Construction, Inc.

L&G Project Number: E130201-1
L&G Report Number: R005-1
Sample Date: 10/27/2020
Date Reported: 11/11/2020

Page 2 of 2

Test No.	Test Location	Proctor No	Moisture Content	Dry Density	Percent Compaction	6
9	Driveway to Building Pad 40' W. & 15' S of NE Corner of Building Pad	IS MD 1	9.7%	116.5 pcf	99.6% (Fail)	6"
10	Driveway 25' E. & 8' S of SW Corner of Building Pad	IS MD 1	8.7%	115.3 pcf	98.6% (Fail)	6"
11	Driveway 25' E & 8' S of SW Corner of Building Pad	IS MD 1	10.0%	113.4 pcf	96.9% (Fail)	6"

Remarks: Test results are NOT in general compliance with the project specifications, RE-TESTS will be coordinated.

Test Methods: ASTM D2922, D3017

Orig: Celso Gonzalez Construction, Inc.
 (Mission, TX) Attn: Celso Gonzalez
 (1-cc copy)
 1-cc Halff & Associates, Inc.
 Attn: Robert L. Saenz, PE, CFM, PMP
 1-cc Celso Gonzalez Construction, Inc.
 Attn: Celso Gonzalez
 1-cc Laboratory

Respectfully Submitted,
L&G Engineering



Ricardo Gallaga, P.E, Project Manager

FIELD DENSITIES TEST REPORT

Project Description: Hidalgo County Sheriff's Bus Barn
Client: Hidalgo County Pct. #4
Engineer: Halff & Associates, Inc.
Contractor: Celso Gonzalez Construction, Inc.

L&G Project Number: E130201
L&G Report Number: R006
Sample Date: 11/04/2020
Date Reported: 11/04/2020

Page 1 of 1

Material Description	Caliche (Base MD)		
Required % Proctor	95	Moisture Tolerance	-1+3
	Proctor No	Optimum % Moisture	Opt. Density, LB/CF
	BASE MD 3	14.9	110.9

Test No.	Test Location	Proctor No	Moisture Content	Dry Density	Percent Compaction	6
1	Building Pad 20' S. & 40' W. of N. E. Corner	BASE MD 3	14.7%	107.5 pcf	96.9% (Pass)	6"
2	Building Pad 15' N. & 60' E. of SW Corner	BASE MD 3	15.5%	106.5 pcf	96.0% (Pass)	6"
3	Building Pad 45' W & 10' N. of SE Corner Driveway Area	BASE MD 3	15.5%	106.1 pcf	95.7% (Pass)	6"
4	Building Pad 10' N. & 30' E. of SW Corner	BASE MD 3	14.9%	112.0 pcf	101.0% (Pass)	6"

Remarks: Test results are in general compliance with the project specifications except as noted.
Test Methods: ASTM D2922, D3017

Orig: Hidalgo County Pct. #4 (E130) (Hidalgo County Pct. #4)
 (Edinburg, TX) Attn: Maria Lucio
 (1-cc copy)
 1-cc Halff & Associates, Inc.
 Attn: Robert L. Saenz, PE, CFM, PMP
 1-cc Celso Gonzalez Construction, Inc.
 Attn: Celso Gonzalez
 1-cc Laboratory

Respectfully Submitted,
 L&G Engineering



Ricardo Gallaga, P.E, Project Manager

CONCRETE COMPRESSION TEST REPORT

Project Description: Hidalgo County Sheriff's Bus Barn
Client: Hidalgo County Pct. #4
Engineer: Halff & Associates, Inc.
Contractor: Celso Gonzalez Construction, Inc.

L&G Project Number: E130201
L&G Report Number: R008-28
Sample Date: 10/08/2020
Date Reported: 10/08/2020

Page 1 of 1

Placement Location: _____	Drilled Piers - from Benchmark 1-4 Piers	
Mix ID: <u>4000 CRI</u>	Supplier: <u>CRM</u>	
Specified Strength: <u>4,000 P.S.I. @ 28 days</u>		
Specified Slump: <u>Max 5</u>		Slump: <u>6.5"</u>
Specified Air Content: <u>As Approved</u>		Air Content: <u>1.2%</u>
Weather Conditions: _____	<u>Cloudy - Hot</u>	Air Temp.: <u>82°f</u>
Time Batched: <u>9:05 am</u>	Time Sampled: <u>10:30 am</u>	Concrete Temp.: <u>90°f</u>
Plant Ticket No: <u>540876</u>	Truck No: <u>272</u>	CY: <u>10</u>
Water: <u>0 gal.</u>		

Compressive Strength Data

Set No.	Identification	Test Date	Age (days)	Max Load (pounds)	Diameter	Area	Break Type	Comp. Strength	Average Strength (psi)	% of Design	Tested By
1	A	10/15/2020	7	100,310	6.000	28.274	Columnar	3,550		88.75%	E. Casares
	B	10/15/2020	7	97,475	6.000	28.274	Shear	3,450	3,500	86.25%	E. Casares
	C	11/05/2020	28	136,770	6.000	28.274	Coneshear	4,840		121.00%	W. Lozano
	D	11/05/2020	28	137,125	6.000	28.274	Coneshear	4,850	4,840	121.25%	W. Lozano

Remarks/Comments:

6 x 12 in. Cylinders ASTM C31, C39, C138, C143, C172, C231, C1064, C1231; AASHTO T22, T23, T119, T121, T141, T152
 Test Methods: ASTM C31, C39, C138, C143, C172, C231, C1064, C1231; AASHTO T22, T23, T119, T121, T141, T152, T

Orig: Hidalgo County Pct. #4 (E130) (Hidalgo County Pct. #4)
 (Edinburg, TX) Attn: Maria Lucio
 (1-cc copy)
 1-cc Halff & Associates, Inc.
 Attn: Robert L. Saenz, PE, CFM, PMP
 1-cc Celso Gonzalez Construction, Inc.
 Attn: Celso Gonzalez
 1-cc Laboratory

Respectfully Submitted,
L&G Engineering