



PO 146044
Rec 383108
11/28/16

Reviewed by
HT 11/16/2016

AP

Houston 6120 S. Dairy Ashford Rd.
Austin Houston, TX 77072-1010
Dallas 281.933.7388 Ph
San Antonio 281.933.7293 Fax
www.hvj.com

Sunday, October 2, 2016 - Saturday, October 29, 2016

To: Mr. R. Brent Patterson, PE
c/o Fort Bend County Engineer
301 Jackson Street
Richmond, TX 77469

HVJ Project #: HC1610204
HVJ Invoice #: 16-347
HVJ Client #:
Date: 11/4/2016
Terms: Net 30 Days
Page: 1 of 3

Project: Widening and Construction of Bellaire Blvd.
from East Parkway Lakes to Lakehead Lane

Please Remit Payment to:
HVJ Associates, Inc.
P.O. Box 670581
Dallas, TX 75267-0581

PAST DUE INVOICES
Billing Inquiries: 281-983-8842

Date/ Report No	Description		Unit Price	Unit Measure	Quantity	Amount
1003/WS206	Tech 2/Field Soil, Concrete Testing & Proof Roll	Nicet II	\$ 65.00	hour	8.00	\$ 520.00
1003/WS206	Tech 2/Field Soil, Concrete Testing & Proof Roll	OT	\$ 97.50	hour	1.50	\$ 146.25
1003/WS206	Lab - Concrete Cylinder		\$ 17.00	each	4.00	\$ 68.00
1003/WS206	Engineering Report Review (@ 0.10 hr/report)		\$ 149.00	hour	0.50	\$ 74.50
1003/WS206	Nuclear Gauge		\$ 10.50	hour	8.00	\$ 84.00
1003/WS206	Vehicle		\$ 10.00	hour	8.00	\$ 80.00
1004/WS231	Tech 2/Field Soil, Lime Testing & Sample PU	Nicet II	\$ 65.00	hour	8.00	\$ 520.00
1004/WS231	Tech 2/Field Soil, Lime Testing & Sample PU	OT	\$ 97.50	hour	6.00	\$ 585.00
1004/WS231	Lab - Lime Proctor		\$ 225.00	each	1.00	\$ 225.00
1004/WS231	Lab - Atterberg Limit		\$ 62.00	each	1.00	\$ 62.00
1004/WS231	Engineering Report Review (@ 0.10 hr/report)		\$ 149.00	hour	0.50	\$ 74.50
1004/WS231	Nuclear Gauge		\$ 10.50	hour	8.00	\$ 84.00
1004/WS231	Vehicle		\$ 10.00	hour	8.00	\$ 80.00
1004/WS249	Tech 2/Field Sample PU	Nicet II	\$ 65.00	hour	4.00	\$ 260.00
1004/WS249	Lab - CSS for Comp Str		\$ 71.00	each	4.00	\$ 284.00
1004/WS249	Engineering Report Review (@ 0.10 hr/report)		\$ 149.00	hour	0.10	\$ 14.90
1004/WS249	Vehicle		\$ 10.00	hour	4.00	\$ 40.00
1005/WS244	Tech 2/Field Soil, Lime & Proof Roll Testing	Nicet II	\$ 65.00	hour	8.00	\$ 520.00
1005/WS244	Tech 2/Field Soil, Lime & Proof Roll Testing	OT	\$ 97.50	hour	4.75	\$ 463.13
1005/WS244	Engineering Report Review (@ 0.10 hr/report)		\$ 149.00	hour	0.40	\$ 59.60
1005/WS244	Nuclear Gauge		\$ 10.50	hour	8.00	\$ 84.00
1005/WS244	Vehicle		\$ 10.00	hour	8.00	\$ 80.00
1006/WS257	Tech 2/Field Soil, Concrete Testing & Gradation	Nicet II	\$ 65.00	hour	8.00	\$ 520.00
1006/WS257	Tech 2/Field Soil, Concrete Testing & Gradation	OT	\$ 97.50	hour	2.75	\$ 268.13
1006/WS257	Lab - Concrete Cylinder		\$ 17.00	each	4.00	\$ 68.00
1006/WS257	Engineering Report Review (@ 0.10 hr/report)		\$ 149.00	hour	0.40	\$ 59.60
1006/WS257	Nuclear Gauge		\$ 10.50	hour	8.00	\$ 84.00
1006/WS257	Vehicle		\$ 10.00	hour	8.00	\$ 80.00
1007/WS265	Tech 2/Field Soil, Concrete Testing & Sample PU	Nicet II	\$ 65.00	hour	8.00	\$ 520.00
1007/WS265	Tech 2/Field Soil, Concrete Testing & Sample PU	OT	\$ 97.50	hour	8.75	\$ 853.13
1007/WS265	Lab - CSS Comp Str		\$ 71.00	each	4.00	\$ 284.00
1007/WS265	Lab - Concrete Cylinder		\$ 17.00	each	20.00	\$ 340.00
1007/WS265	Engineering Report Review (@ 0.10 hr/report)		\$ 149.00	hour	0.70	\$ 104.30
1007/WS265	Nuclear Gauge		\$ 10.50	hour	8.00	\$ 84.00
1007/WS265	Vehicle		\$ 10.00	hour	8.00	\$ 80.00
1007/WS273	Tech 2/Field Concrete Testing - Assist	Nicet II	\$ 65.00	hour	2.00	\$ 130.00
1007/WS273	Tech 2/Field Concrete Testing - Assist	OT	\$ 97.50	hour	3.50	\$ 341.25
1007/WS273	Vehicle		\$ 10.00	hour	5.50	\$ 55.00
1008/WS323	Tech 2/Field Soil Testing & Cyl PU - Cancel	Nicet II	\$ 97.50	hour	6.00	\$ 585.00
1008/WS323	Engineering Report Review (@ 0.10 hr/report)		\$ 149.00	hour	0.00	\$ -
1008/WS323	Nuclear Gauge		\$ 10.50	hour	6.00	\$ 63.00
1008/WS323	Vehicle		\$ 10.00	hour	6.00	\$ 60.00
1010/WS296	Tech 2/Field Soil, Lime Testing & Sample PU	Nicet II	\$ 65.00	hour	8.00	\$ 520.00
1010/WS296	Tech 2/Field Soil, Lime Testing & Sample PU	OT	\$ 97.50	hour	1.75	\$ 170.63
1010/WS296	Lab - Lime Proctor		\$ 225.00	each	1.00	\$ 225.00
1010/WS296	Lab - Atterberg Limit		\$ 62.00	each	1.00	\$ 62.00
1010/WS296	Engineering Report Review (@ 0.10 hr/report)		\$ 149.00	hour	0.40	\$ 59.60
1010/WS296	Nuclear Gauge		\$ 10.50	hour	8.00	\$ 84.00
1010/WS296	Vehicle		\$ 10.00	hour	8.00	\$ 80.00
1011/WS336	Tech 2/Field Soil, Concrete Testing & Sample PU	Nicet II	\$ 65.00	hour	8.00	\$ 520.00
1011/WS336	Tech 2/Field Soil, Concrete Testing & Sample PU	OT	\$ 97.50	hour	7.00	\$ 682.50
1011/WS336	Lab - CSS Comp Str		\$ 71.00	each	4.00	\$ 284.00
1011/WS336	Lab - Concrete Cylinder		\$ 17.00	each	20.00	\$ 340.00
1011/WS336	Engineering Report Review (@ 0.10 hr/report)		\$ 149.00	hour	0.70	\$ 104.30
1011/WS336	Nuclear Gauge		\$ 10.50	hour	8.00	\$ 84.00
1011/WS336	Vehicle		\$ 10.00	hour	8.00	\$ 80.00
1011/WS343	Tech 2/Field Concrete Testing - Assist	Nicet II	\$ 65.00	hour	2.00	\$ 130.00
1011/WS343	Tech 2/Field Concrete Testing - Assist	OT	\$ 97.50	hour	3.50	\$ 341.25
1011/WS343	Vehicle		\$ 10.00	hour	5.50	\$ 55.00

Date/			Unit	Unit		
Report No	Code Description		Price	Measure	Quantity	Amount
1012/W5358	Tech 2/Field Soil, Concrete Testing & Gradation	Nicet II	\$ 65.00	hour	8.00	\$ 520.00
1012/W5358	Tech 2/Field Soil, Concrete Testing & Gradation		OT \$ 97.50	hour	4.25	\$ 414.38
1012/W5358	Lab - Concrete Cylinder		\$ 17.00	each	4.00	\$ 68.00
1012/W5358	Engineering Report Review (@ 0.10 hr/report)		\$ 149.00	hour	0.30	\$ 44.70
1012/W5358	Nuclear Gauge		\$ 10.50	hour	8.00	\$ 84.00
1012/W5358	Vehicle		\$ 10.00	hour	8.00	\$ 80.00
1013/W5374	Tech 2/Field Soil & Lime Testing	Nicet II	\$ 65.00	hour	8.00	\$ 520.00
1013/W5374	Tech 2/Field Soil & Lime Testing		OT \$ 97.50	hour	2.75	\$ 268.13
1013/W5374	Engineering Report Review (@ 0.10 hr/report)		\$ 149.00	hour	0.30	\$ 44.70
1013/W5374	Nuclear Gauge		\$ 10.50	hour	8.00	\$ 84.00
1013/W5374	Vehicle		\$ 10.00	hour	8.00	\$ 80.00
1014/W5384	Tech 2/Field Concrete Testing	Nicet II	\$ 65.00	hour	8.00	\$ 520.00
1014/W5384	Tech 2/Field Concrete Testing		OT \$ 97.50	hour	6.00	\$ 585.00
1014/W5384	Lab - Concrete Cylinder		\$ 17.00	each	32.00	\$ 544.00
1014/W5384	Engineering Report Review (@ 0.10 hr/report)		\$ 149.00	hour	0.50	\$ 74.50
1014/W5384	Vehicle		\$ 10.00	hour	8.00	\$ 80.00
1014/W5390	Tech 2/Field Soil Testing	Nicet II	\$ 65.00	hour	7.50	\$ 487.50
1014/W5390	Engineering Report Review (@ 0.10 hr/report)		\$ 149.00	hour	0.10	\$ 14.90
1014/W5390	Nuclear Gauge		\$ 10.50	hour	7.50	\$ 78.75
1014/W5390	Vehicle		\$ 10.00	hour	7.50	\$ 75.00
1015/W5419	Tech 2/Field Soil Testing & Cyl PU - Cancel	Nicet II	OT \$ 97.50	hour	6.00	\$ 585.00
1015/W5419	Engineering Report Review (@ 0.10 hr/report)		\$ 149.00	hour	0.00	\$ -
1015/W5419	Nuclear Gauge		\$ 10.50	hour	6.00	\$ 63.00
1015/W5419	Vehicle		\$ 10.00	hour	6.00	\$ 60.00
1017/W5420	Tech 2/Field Soil & Lime Testing	Nicet II	\$ 65.00	hour	8.00	\$ 520.00
1017/W5420	Tech 2/Field Soil & Lime Testing		OT \$ 97.50	hour	2.50	\$ 243.75
1017/W5420	Engineering Report Review (@ 0.10 hr/report)		\$ 149.00	hour	0.30	\$ 44.70
1017/W5420	Nuclear Gauge		\$ 10.50	hour	8.00	\$ 84.00
1017/W5420	Vehicle		\$ 10.00	hour	8.00	\$ 80.00
1018/W5445	Tech 2/Field Soil & Concrete Testing	Nicet II	\$ 65.00	hour	8.00	\$ 520.00
1018/W5445	Tech 2/Field Soil & Concrete Testing		OT \$ 97.50	hour	8.00	\$ 780.00
1018/W5445	Lab - Concrete Cylinder		\$ 17.00	each	24.00	\$ 408.00
1018/W5445	Engineering Report Review (@ 0.10 hr/report)		\$ 149.00	hour	0.50	\$ 74.50
1018/W5445	Nuclear Gauge		\$ 10.50	hour	8.00	\$ 84.00
1018/W5445	Vehicle		\$ 10.00	hour	8.00	\$ 80.00
1018/W5448	Tech 2/Field Concrete Testing - Assist	Nicet II	\$ 65.00	hour	3.00	\$ 195.00
1018/W5448	Tech 2/Field Concrete Testing - Assist		OT \$ 97.50	hour	2.00	\$ 195.00
1018/W5448	Vehicle		\$ 10.00	hour	5.00	\$ 50.00
1019/W5463	Tech 2/Field Soil & Lime Testing	Nicet II	\$ 65.00	hour	8.00	\$ 520.00
1019/W5463	Tech 2/Field Soil & Lime Testing		OT \$ 97.50	hour	0.50	\$ 48.75
1019/W5463	Engineering Report Review (@ 0.10 hr/report)		\$ 149.00	hour	0.10	\$ 14.90
1019/W5463	Nuclear Gauge		\$ 10.50	hour	8.00	\$ 84.00
1019/W5463	Vehicle		\$ 10.00	hour	8.00	\$ 80.00
1020/W5472	Tech 2/Field Soil, Concrete Testing & Sample PU	Nicet II	\$ 65.00	hour	8.00	\$ 520.00
1020/W5472	Tech 2/Field Soil, Concrete Testing & Sample PU		OT \$ 97.50	hour	8.00	\$ 780.00
1020/W5472	Lab - CSS Comp Str		\$ 71.00	each	4.00	\$ 284.00
1020/W5472	Lab - Concrete Cylinder		\$ 17.00	each	26.00	\$ 442.00
1020/W5472	Engineering Report Review (@ 0.10 hr/report)		\$ 149.00	hour	0.80	\$ 119.20
1020/W5472	Nuclear Gauge		\$ 10.50	hour	8.00	\$ 84.00
1020/W5472	Vehicle		\$ 10.00	hour	8.00	\$ 80.00
1020/W5473	Tech 2/Field Concrete Testing - Assist	Nicet II	\$ 65.00	hour	3.00	\$ 195.00
1020/W5473	Tech 2/Field Concrete Testing - Assist		OT \$ 97.50	hour	4.00	\$ 390.00
1020/W5473	Vehicle		\$ 10.00	hour	7.00	\$ 70.00
1021/W5490	Tech 2/Field Soil, Concrete Testing & Lime	Nicet II	\$ 65.00	hour	8.00	\$ 520.00
1021/W5490	Tech 2/Field Soil, Concrete Testing & Lime		OT \$ 97.50	hour	4.00	\$ 390.00
1021/W5490	Lab - Concrete Cylinder		\$ 17.00	each	4.00	\$ 68.00
1021/W5490	Engineering Report Review (@ 0.10 hr/report)		\$ 149.00	hour	0.40	\$ 59.60
1021/W5490	Nuclear Gauge		\$ 10.50	hour	8.00	\$ 84.00
1021/W5490	Vehicle		\$ 10.00	hour	8.00	\$ 80.00
1022/-	Tech 2/Field Cyl PU	Nicet II	OT \$ 97.50	hour	2.00	\$ 195.00
1022/-	Vehicle		\$ 10.00	hour	2.00	\$ 20.00
1024/W5500	Tech 2/Field Soil, Lime & Proof Roll Testing	Nicet II	\$ 65.00	hour	8.00	\$ 520.00
1024/W5500	Tech 2/Field Soil, Lime & Proof Roll Testing		OT \$ 97.50	hour	2.00	\$ 195.00
1024/W5500	Engineering Report Review (@ 0.10 hr/report)		\$ 149.00	hour	0.30	\$ 44.70
1024/W5500	Nuclear Gauge		\$ 10.50	hour	8.00	\$ 84.00
1024/W5500	Vehicle		\$ 10.00	hour	8.00	\$ 80.00
1025/W5528	Tech 2/Field Soil, Concrete Testing & Lime	Nicet II	\$ 65.00	hour	8.00	\$ 520.00
1025/W5528	Tech 2/Field Soil, Concrete Testing & Lime		OT \$ 97.50	hour	8.50	\$ 828.75
1025/W5528	Lab - Concrete Cylinder		\$ 17.00	each	24.00	\$ 408.00
1025/W5528	Engineering Report Review (@ 0.10 hr/report)		\$ 149.00	hour	0.70	\$ 104.30
1025/W5528	Nuclear Gauge		\$ 10.50	hour	8.00	\$ 84.00
1025/W5528	Vehicle		\$ 10.00	hour	8.00	\$ 80.00

Project Number: HC1610204

Project Name: Widening and Construction of Bellaire Blvd. from East Parkway to Lakehead Lane

Report No	Code Description		Price	Measure	Quantity	Amount
1025/W5538	Tech 2/Field Concrete Testing - Assist	Nicet II	\$ 65.00	hour	3.00	\$ 195.00
1025/W5538	Tech 2/Field Concrete Testing - Assist	OT	\$ 97.50	hour	4.00	\$ 390.00
1025/W5538	Vehicle		\$ 10.00	hour	7.00	\$ 70.00
1026/W5544	Tech 2/Field Soil, Lime, Proof Testing & Sample PU	Nicet II	\$ 65.00	hour	8.00	\$ 520.00
1026/W5544	Tech 2/Field Soil, Lime, Proof Testing & Sample PU	OT	\$ 97.50	hour	5.00	\$ 487.50
1026/W5544	Lab - CSS Comp Str		\$ 71.00	each	4.00	\$ 284.00
1026/W5544	Engineering Report Review (@ 0.10 hr/report)		\$ 149.00	hour	0.50	\$ 74.50
1026/W5544	Nuclear Gauge		\$ 10.50	hour	8.00	\$ 84.00
1026/W5544	Vehicle		\$ 10.00	hour	8.00	\$ 80.00
1027/W5554	Tech 2/Field Soil, Concrete Testing & Gradation	Nicet II	\$ 65.00	hour	8.00	\$ 520.00
1027/W5554	Tech 2/Field Soil, Concrete Testing & Gradation	OT	\$ 97.50	hour	4.00	\$ 390.00
1027/W5554	Lab - Concrete Cylinder		\$ 17.00	each	4.00	\$ 68.00
1027/W5554	Engineering Report Review (@ 0.10 hr/report)		\$ 149.00	hour	0.30	\$ 44.70
1027/W5554	Nuclear Gauge		\$ 10.50	hour	8.00	\$ 84.00
1027/W5554	Vehicle		\$ 10.00	hour	8.00	\$ 80.00
1028/W5583	Tech 2/Field Soil, Concrete Testing & Gradation	Nicet II	\$ 65.00	hour	8.00	\$ 520.00
1028/W5583	Tech 2/Field Soil, Concrete Testing & Gradation	OT	\$ 97.50	hour	8.00	\$ 780.00
1028/W5583	Lab - Concrete Cylinder		\$ 17.00	each	30.00	\$ 510.00
1028/W5583	Engineering Report Review (@ 0.10 hr/report)		\$ 149.00	hour	0.60	\$ 89.40
1028/W5583	Nuclear Gauge		\$ 10.50	hour	8.00	\$ 84.00
1028/W5583	Vehicle		\$ 10.00	hour	8.00	\$ 80.00
1029/-	Tech 2/Field Cyl PU	Nicet II	\$ 97.50	hour	2.25	\$ 219.38
1029/-	Vehicle		\$ 10.00	hour	2.25	\$ 22.50

Amount Due \$ 35,299.26

Billing Summary

Contract Amount	\$92,857
Current Invoice Amount	\$ 35,299.26
Previously Billed	\$ 22,916.74
Total Billed Project to Date	\$ 58,216.00
Amount Remaining in the Contract	\$ 34,641.00
Percent Complete	62.7%

Certification

I certify that the above shown duly reflects services performed on referenced contract and that none of the sums currently billed have previously been paid. I also certify that all services have been performed for which payment is requested.

Hirendraj Patel
Hirendra (Harry) Patel, PE
CME Manager, Houston

OK, JSS
11/23/16



Houston 6120 S. Dairy Ashford Rd.
 Austin Houston, TX 77072-1010
 Dallas 281.933.7388 Ph
 San Antonio 281.933.7293 Fax
 www.hvj.com

LIME SLURRY MONITORING

Project Name: Widening and Construction of Bellaire Blvd.
 Project No: HC1610204 Report No: FLS-HOU-W5206-01
 Client: Fort Bend County Start Time: 6:00 AM
 Contractor: Aligood Construction Co. End Time: 4:00 PM
 HVJ Technician: N. Anders Lunch: .50
 Date: 10/03/16 Total Hours: 9.5

Recommended Application Rate (lbs/yd²) = 40

Recommended Treatment Depth (in.) = 8

Required Minimum Percent Solids (%) = 35 Required Minimum Percent Lime (%) = 6

Ticket No.	A	Specific Gravity (From Mud Scale)	B	C = AxB	Placement Location (Provide sketch for areas without Station Nos.)	D	E = C/D
	Net Load		% Dry Solids	Dry Solids		Area	Rate of Placement
	(lbs)		(From Chart)	(lbs)		(yd ²)	(lbs/yd ²)
114961781	51,720	1.322	44.5	23015	Sta 76+97 to 75+25 WBML (Area 172'x27') = 4644 sq ft	516.0	44.6
114959688	51,700	1.310	43.2	22334	Sta 75+25 to 73+45 WBML (Area 180'x27') = 4860 sq ft	540.0	41.4
114964672	51,540	1.330	45.3	23348	Sta 73+45 to 71+71 WBML (Area 174'x27') = 4698 sq ft	522.0	44.7
114958265	49,900	1.320	44.3	22106	Sta 71+71 to 70+01 WBML (Area 170'x27') = 4590 sq ft	510.0	43.3
114958265	51,620	1.340	46.4	23952	Sta 70+01 to 68+28 WBML (Area 173'x27') = 4671 sq ft	519.0	46.1
114959770	51,500	1.314	43.7	22506	Sta 68+28 to 66+52 WBML (Area 176'x27') = 4752 sq ft	528.0	42.6
114956981	51,600	1.321	44.4	22910	Sta 110+36 to 108+64 EBML (Area 172'x27') = 4644 sq ft	516.0	44.4

Note: All test results meet specification except those marked with an *

COMMENTS:

All Test results were informed to Alejandro

JP
 Reviewed By:

Harendra (Harry) Patel, PE
 Firm PE Registration No. F-000646



Houston | 6120 S. Dalry Ashford Rd.
Austin | Houston, TX 77072-1010
Dallas | 281.933.7388 Ph
San Antonio | 281.933.7293 Fax
www.hvj.com

Gradation of Lime Stabilized Subgrade Report

TO: Mr. R. Brent Patterson, PE
c/o Fort Bend County Engineers
301 Jackson Street
Richmond, TX 77469

REPORT DATE: 10/3/2016
Project No. HC1610204
Report No. HOU-FG-W5206-02
Inspector: N. Anders
Start Time: 6:00 AM
End Time: 4:00 PM
Lunch: .50
Total Hours: 9.5

PROJECT: Widening and Construction of Bellaire Blvd. from East Parkway Lakes
to Lakehead Lane

Sample No.	General Location	Sample Location	Sample Wt (lb)	Sieve Size/No.	Sieve Size/Wt (lb)	Percent Retain	Percent Passing	Spec. % Passing (min)
1	EBML Sta 112+85 to 110+00	Sta 111+25	13.2	1 3/4"	0.00	0.0%	100.0%	100%
				3/4"	0.30	2.3%	97.7%	85%
2	EBML Sta 70+50 to 76+97	Sta 73+75	12.2	1 3/4"	0.00	0.0%	100.0%	100%
				3/4"	0.20	1.5%	98.5%	85%
3	EBML Sta 70+50 to 76+97	Sta 71+25	13.7	1 3/4"	0.00	0.0%	100.0%	100%
				3/4"	0.10	0.8%	99.2%	85%

JP
Reviewed By


Himendra Patel, PE

Firm PE Registration No. F-000646

Our letters and reports are for the exclusive use of the client. The use of our name must receive our prior written approval. Our letters and reports apply only to the material(s) tested and/or inspected and are not necessarily indicative of the qualities of apparently identical or similar materials(s). This report may not be reproduced, except in full, without consent of HVJ Associates, Inc.