



P.O. Box 2724
McAllen, Tx. 78502
(956) 585-3773

Invoice

Date	Invoice #
12/4/2017	20048

Please send remittance with copy of invoice to:

Attn: Mrs. Aisha Gonzalez
P.O. Box 2724
McAllen, Tx. 78502

Bill To:
Hidalgo County Precinct #2
300 W. Hall Acres Rd.
Pharr, TX 78577

Project Info:
Hidalgo County Precinct #2
Roadway Pavement Design Project
Engineering Design Values for
Various Roadways
B2Z JOB: 2106
PO # 770538

Billing Period November 2017

Description	Contract	Previous Applications	Current Completed	Total Completed	% Complete	Bal
Industrial Blvd. (15th St. to US 281)						
Task 1 - Review and Evaluate Existing Design/Construction Structure	\$ 472.72	\$ -	\$ 472.72	\$ 472.72	100%	0
Task 2 - Evaluate Foundation Moduli (Based on NRCS Soil Survey)	\$ 236.36	\$ -	\$ 236.36	\$ 236.36	100%	0
Task 3 - Implement Monitoring Plan for Traffic Data (Veh. Counts & % Trucks)	\$ 2,164.56	\$ -	\$ 2,164.56	\$ 2,164.56	100%	0
Task 4 - Develop Design Values for Projects (TxDOT & USACE)	\$ 2,718.14	\$ -	\$ 2,718.14	\$ 2,718.14	100%	0
Task 5 - Analyze Stabilization Measures (As Needed)	\$ 827.26	\$ -	\$ 827.26	\$ 827.26	100%	0
Task 6 - Develop Material Recommendations	\$ 625.11	\$ -	\$ 625.11	\$ 625.11	100%	0
Task 7 - Provide Final Design Reports	\$ 3,085.12	\$ -	\$ 2,776.61	\$ 2,776.61	90%	308.51
Task 8 - Meetings/Coordination	\$ 718.41	\$ -	\$ 646.57	\$ 646.57	90%	71.84
Valmex Rd. (SH 336 to 1691 West of Valmex)						
Task 1 - Review and Evaluate Existing Design/Construction Structure	\$ 472.72	\$ -	\$ 472.72	\$ 472.72	100%	0
Task 2 - Evaluate Foundation Moduli (Based on NRCS Soil Survey)	\$ 236.36	\$ -	\$ 236.36	\$ 236.36	100%	0
Task 3 - Implement Monitoring Plan for Traffic Data (Veh. Counts & % Trucks)	\$ 1,642.08	\$ -	\$ 1,642.08	\$ 1,642.08	100%	0
Task 4 - Develop Design Values for Projects (TxDOT & USACE)	\$ 1,772.70	\$ -	\$ 1,772.70	\$ 1,772.70	100%	0
Task 5 - Analyze Stabilization Measures (As Needed)	\$ 827.26	\$ -	\$ 827.26	\$ 827.26	100%	0
Task 6 - Develop Material Recommendations	\$ 625.11	\$ -	\$ 625.11	\$ 625.11	100%	0
Task 7 - Provide Final Design Reports	\$ 2,612.40	\$ -	\$ 2,351.16	\$ 2,351.16	90%	261.24
Task 8 - Meetings/Coordination	\$ 836.59	\$ -	\$ 752.93	\$ 752.93	90%	83.66
Direct Expenses						
Mileage	\$ 126.00	\$ -	\$ 126.00	\$ 126.00	100%	0
			<u>19,998.90</u>	<u>19,273.65</u>	<u>19,273.65</u>	<u>725.25</u>
Total For This Billing Period					\$19,273.65	

Work Authorization - Summary

WA No.	WA Amount	Previously Inv.	Percent Complete	Remaining Balance
1	\$19,998.90	\$0.00	96.4%	\$725.25

Aisha Gonzalez
Aisha Gonzalez - President

INVOICE RECEIVED BY:
Elizabeth Casas ON 12/6/17
GOODS/SERVICES RECEIVED BY:
Eduardo Cantu ON 11/01-30/17

$\$8,743.32 \times 79\% = \$6,907.22$ obj. 721
 $\$8,743.32 \times 21\% = \$1,836.10$ obj. 841 > Valmex Dr.
 $\$8,743.32$

PO # 770538
7-1200-431-00-122-142-0-841
Req # 360960
\$ 10,467.33

PO # 770538
7-1200-431-00-122-143-0-
Req # 360960
721/841
721 (79%) = \$6,907.22
841 (21%) = \$1,836.10

December 4, 2017

Mr. Armando Garza, Jr., Chief Administrator
Attn: Ms. Erika Zamora, Director of Administrative Operations
 Hidalgo County Precinct No. 2
 300 West Hall Acres Rd, Ste. G
 Pharr, Texas 78577

RE: Contract # 17-229-08-22 – Road and Bridge, CIP and Other Projects in General (On Call)
Work Authorization #1 – Engineering Design Values for Various Roadways
P.O. # 770538 ✓

Dear Ms. Zamora,

Attached for your review and approval is our invoice for services rendered under Work Authorization #1 of the subject Contract during the month of November 2017 on the subject referenced project.

The following is attached:

- Invoice No. 20048 ✓

The following is a narrative of the progress for this period.

TASK (Project: Industrial Blvd. (15th Street to US 281)) ✓	% COMPL
Task 1 – Review and Evaluate Existing Design/Construction Structure	100.0% ✓
Update – B2Z conducted field inspection and evaluation of the project utilizing non-destructive inspection techniques. Data collected was utilized in the pavement analysis and design. Task Complete.	
Task 2 – Evaluate Foundation Moduli (Based on NRCS Soil Survey)	100.0% ✓
Update – B2Z utilized the NRCS Soil Survey website to define the founding soils in terms of general soils data (PI, LL, % Sand, etc.). This info was utilized to select an appropriate foundation subgrade modulus for use in pavement design. Task Complete.	
Task 3 – Implement Monitoring Plan for Traffic Data (Vehicle Counts & % Trucks)	100.0% ✓
Update – B2Z coordinated a traffic monitoring plan and utilized collected vehicular data to develop the pavement design and calculate predicted ESALS for pavement design. In addition, B2Z utilized this data to establish probable ATHWLD. Task Complete.	
Task 4 – Develop Design Values for Projects (TxDOT & USACE)	100.0% ✓
Update – B2Z developed design values for use in pavement design such as definition of ESALS, Subgrade Modulus and Pavement & Overlay Criteria. Task Complete.	

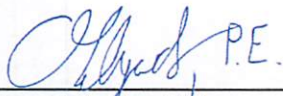
Task 5 – Analyze Stabilization Measures (As Needed)	100.0%
Update – B2Z utilized the results of the Pavement Design (iteratively) and the graphical charts of Tex-121-E to analyze stabilization measures for the subgrade and flexible base layers of the pavement design. These results were then modeled in the final pavement design analyzed. Task Complete.	
Task 6 – Develop Material Recommendations	100.0%
Update – B2Z developed material recommendations based on the analysis and design noted. B2Z developed cost effective choices (provided cost estimate breakdowns) for the material recommendations. Task Complete.	
Task 7 – Provide Final Design Reports	90.0%
Update – B2Z developed a final Pavement Design Report utilizing TxDOT FPS 21 and based on the data and analyses discussed in this progress report. B2Z also completed a Triaxial Verification utilizing the program. All information presented to HC Pct 2 pending only concurrence for completion of report.	
Task 8 – Meetings/Coordination	90.0%
Update – B2Z has coordinated with Mr. Armando Garza and Mr. Armando Pompa of HC Pct. 2 throughout the entirety of this project to ensure adequate and cost effective decisions were being implemented for best options to HC Pct. 2.	

TASK (Project: Valmex Rd. (SH 336 to 1691' West of Valmex))	% COMPL
Task 1 – Review and Evaluate Existing Design/Construction Structure	100.0%
Update – B2Z conducted field inspection and evaluation of the project utilizing non-destructive inspection techniques. Data collected was utilized in the pavement analysis and design. Task Complete.	
Task 2 – Evaluate Foundation Moduli (Based on NRCS Soil Survey)	100.0%
Update – B2Z utilized the NRCS Soil Survey website to define the founding soils in terms of general soils data (PI, LL, % Sand, etc.). This info was utilized to select an appropriate foundation subgrade modulus for use in pavement design. Task Complete.	
Task 3 – Implement Monitoring Plan for Traffic Data (Vehicle Counts & % Trucks)	100.0%
Update – B2Z coordinated a traffic monitoring plan and utilized collected vehicular data to develop the pavement design and calculate predicted ESALS for pavement design. In addition, B2Z utilized this data to establish probable ATHWLD. Task Complete.	
Task 4 – Develop Design Values for Projects (TxDOT & USACE)	100.0%
Update – B2Z developed design values for use in pavement design such as definition of ESALS, Subgrade Modulus and Pavement & Overlay Criteria. Task Complete.	
Task 5 – Analyze Stabilization Measures (As Needed)	100.0%
Update – B2Z utilized the results of the Pavement Design (iteratively) and the graphical charts of Tex-121-E to analyze stabilization measures for the subgrade and flexible base layers of the pavement design. These results were then modeled in the final pavement design analyzed. Task Complete.	
Task 6 – Develop Material Recommendations	100.0%

<p>Update – B2Z developed material recommendations based on the analysis and design noted. B2Z developed cost effective choices (provided cost estimate breakdowns) for the material recommendations. Task Complete.</p>		
<p>Task 7 – Provide Final Design Reports</p>		90.0% <i>cl</i>
<p>Update – B2Z developed a final Pavement Design Report utilizing TxDOT FPS 21 and based on the data and analyses discussed in this progress report. B2Z also completed a Triaxial Verification utilizing the program. All information presented to HC Pct 2 pending only concurrence for completion of report.</p>		
<p>Task 8 – Meetings/Coordination</p>		90.0% <i>cl</i>
<p>Update – B2Z has coordinated with Mr. Armando Garza and Mr. Armando Pompa of HC Pct. 2 throughout the entirety of this project to ensure adequate and cost effective decisions were being implemented for best options to HC Pct. 2.</p>		

Should you have any questions regarding this submittal, please do not hesitate to contact me at (956) 585-3773.

Sincerely,



Oliver Salgado, P.E.
 Senior Project Manager
 B2Z Engineering, LLC