B2Z ENGINEERING

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

PO # 888404
5 -1315-431-00-122-136 -0- 721/841
Req # 504711
(721)= $ 534.70 (841)=$ 802.05

Invoice

Date	Invoice #
6/4/2025	20501

PO # N/A
5 -1315-126-10-122-136 -0- 000
Req # N/A
$ 31,452.93

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

PO # N/A
5 -1315-126-20-122-136 -0- 000
Req # N/A
$ 6,526.48

RECEIVED JUN - 4 2025

Project Info:
Nolana Loop Road Project
Contract # C-24-0118-10-01
Work Authorization #1 PO#888404
Construction Phase Services

B2Z JOB: 2322

Billing Period **May 2025**

Description	Contract	Previous Applications	Current Completed	Total Completed	% Complete	Bal
Construction Contract Administration	$ 233,983.74	$ 39,777.24	$ 4,679.67	$ 44,456.91	19%	189,526.83
Construction Management & Inspection						
Construction Management (During Construction)	$ 348,746.20	$ 34,874.62	$ 6,974.92	$ 41,849.54	12%	306,896.66
Construction Inspection	$988,509.08	$ 98,850.91	$ 19,770.18	$ 118,621.09	12%	869,887.99
Construction Management (Post Construction)	$33,823.66	$ -	$ -	$ -	0%	33,823.66
Miscellaneous Technical Activities	$89,915.92	$ 8,991.59	$ 1,798.32	$ 10,789.91	12%	79,126.01
Direct Expenses						
Mileage	$ 25,084.80	$ 2,508.48	$ 501.70	$ 3,010.18	12%	22,074.62
Construction Material Testing (CMT)	$ 279,568.64	$ 16,774.12	$ 5,591.37	$ 22,365.49	8%	257,203.15
	1,999,632.04	201,776.96	39,316.16	241,093.12		1,758,538.92
			Total For This Billing Period			39,316.16

Work Authorization ~ Summary

WA No.	WA Amount	Previously Inv.	Percent Complete	Remaining Balance
1	$1,999,632.04	$201,776.96	12.1%	$1,758,538.92

Aisha Gonzalez - President

$39,316.16 x 80% = $31,452.93
$39,316.16 x 16.6% = $6,526.48
$39,316.16 x 3.4% = $1,336.75 —— $1,336.75 x 40% = $534.70
$1,336.75 x 60% = $802.05

INVOICE RECEIVED BY:
lupita garza ON 06/04/25
GOODS/SERVICES RECEIVED BY:
Eduardo Cantu ON 05/01-31/25

B2Z ENGINEERING

June 4, 2025

Hon. Eddie Cantu
Commissioner, Hidalgo County Pct. 2
300 W. Hall Acres Rd.
Pharr, TX 78577

RE: Contract # C-24-0118-10-01 ~ Nolana Loop Road Project
Work Authorization #1 ~ Construction Phase Services

Dear Commissioner Cantu:

Attached for review and approval is our invoice for services rendered under Work Authorization #1 during the month of May 2025 on the subject referenced project.

The following invoice is attached:

- Invoice No. 20501 ✓

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

TASK	% Complete
Construction Contract Administration	**19%** ✓
UPDATED: The Notice to Proceed was issued for December 11, 2024. In March 2025, B2Z initiated a meeting with Commissioner Cantu to continue discussions with Anthony Stambaugh and L&G Engineering for acquiring two easements for ID#2 and NAWS utilities adjustments during construction. On March 20, 2025, L&G and B2Zmet with Anthony Stambaugh to discuss easements, existing irrigation lines, relocating irrigation and water lines, relocating existing easements and drain lines. Negotiating Change Order #1 for cost savings in three items that are not required on Nolana Loop. L&G is negotiating Change Order #2 for a canal realignment with ID#2. Concerns: The realignment of the ID#2 canal. ID#2 did not approve of the original planned design, and the project let without resolution stalling the irrigation canal reconstruction. In good faith, L&G redesigned a better solution (CO), realigning the irrigation canal and drainage ditches to provide the same services and reconstruct the road. It was a very good design.	

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(956) 585-3773 • www.B2ZEng.com

Current negotiations between L&G & ID#2 ceased because ID#2 did not like the CO and started telling L&G how to redesign the irrigation canal and ditch design. L&G reviewed the idea and determined that ID#2 ideas were not practical for the new crossing. This location will become time sensitive very quickly if a resolution is not determined soon. Concerns: Acquisitions of two easement locations to replace the existing easements for ID#2 and NAWS. The existing easements became part of the new Nolana Road. Once acquired, the newly installed lines will replace the existing lines that can be abandoned in place.	
Construction Management & Inspection	
Construction Management (During Construction)	**12%** ✓
UPDATED: B2Z continues meeting with Texas Cordia, bi-monthly for quantities and concerns. On **December 5, 2024, w**e with Gilma Guevera (PM1) and Wendy Santoy (assist) started the Nolana Project. On **May 28, 2024,** B2Z met Luis Lozano (new PM2) to discuss quantities and explain the project process to him. He is not familiar with roadway construction but has a good background with material testing. B2Z explained the project concerns with timely estimates, timely payments, relocation of utilities, CO's, ID#2 & NAWS and TxDOT. B2Z continues to meet w/ MVE, Spectrum, AEP, NAWS, AT&T and the City of San Juan to relocate utilities. B2Z continues to meet with MVE while relocated poles on Nolana Loop from Cesar Chavez and FM 907(Alamo Rd). MVE, B2Z continues to meet with Spectrum to relocate lines to the new poles on Cesar Chavez Road. B2Z continues to meet with Mr. Eddie Rios, and the City of San Juan to identify sanitary and water lines to adjust manhole tops or relocate the lines. The City of San Juan identified a new force main sanitary sewer under the west side of C. Chavez Road, running parallel and under the new road. The city did not have a set of plans identifying its exact location.	
Construction Inspection	**12%** ✓
UPDATED: The contractor placed barricades on **January 20th, 2025**. The contractor completed two detours, one on Ceasar Chavez and a 2nd on Nolana near the Wick Center. The ID#2 continues to warn TC about working over existing easements without a permit, and B2Z continues to inform TC they are working within the Nolana	

Loop ROW as acquired. Two new easements are being purchased for both NAWS and ID#2. The farmers and property owners are working well with the TC so as not to impact irrigation services and/or harvesting during the construction. TC continued working along the side of the farmers while planting, watering and picking. TC is installing 72" RCP and CMP on Nolana, west of Raul Longoria Road. TC is about 60% complete with the outfalls for DD#1. TC had to close Minnesota Road to install box culverts across the road to the LJ Drain.	
Construction Management (Post Construction)	**0%** /
NO UPDATE: *The task has not begun.*	
Misc. Technical Activities	**12%** /
B2Z continues working closely with Hidalgo County to purchase easement properties and resolve ROW issues with ID#2 and NAWS. L&G continue assisting B2Z with utility issues and ROW concerns. B2Z contacted the City of San Juan about the existing sanitary sewer line under the roadway. P2 may have to adjust the existing manhole tops, temporarily.	
Direct Expenses	
Mileage	**12%** /
UPDATED: The Project Manager visits the site 5 Days per Week. Two inspectors visits the site 5 Days per Week.	
Construction Material Testing (CMT)	**8%** /
UPDATED: B2Z is currently testing the RCP and CMP gravel bedding backfill and sand backfill requirements.	

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

Sincerely,

Saul R. Munoz, P.E.
Project Manager

B2Z ENGINEERING
Mission Office
900 S Stewart Rd, Ste. 2
Mission, TX 78572
Phone: 956-585-3773

Cancelled Work Order

Client:	Project:
Hidalgo County Precinct No. 2 300 W Hall Acres, Ste. G Pharr, TX 78577	2322 Nolana Loop CEI various McAllen, TX

General Information

Activity Number:	1	**Activity Date:**	04/21/2025
Technician:	Alvaro Robles Jr.		

Notes

Technician was scheduled for Densities on 04/21/2025 and it was cancelled for weather reasons.

Respectfully Submitted by B2Z Engineering

STATE OF TEXAS
OLIVER F. SALGADO
103749
LICENSED PROFESSIONAL ENGINEER

Oliver Salgado, P.E., Senior Project Manager

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B2Z ENGINEERING

Soil Nuclear Gauge

B2Z Report No. NL-7D
Report Date: 04/24/2025
Test Method: ASTM D 6938

Mission Office
900 S Stewart Rd, Ste. 2
Mission, TX 78572
Phone: 956-585-3773

Client:
Hidalgo County Precinct No. 2
300 W Hall Acres, Ste. G
Pharr, TX 78577

Project:
2322
Nolana Loop CEI
various
McAllen, TX

Test Results

Test #	Retest Of	Test Date	Proctor ID	Method	Soil Classification	Optimum Moisture (%)	Maximum Dry Density (pcf)	In Place Moisture (%)	In Place Dry Density (pcf)	In Place Wet Density (pcf)	Probe Depth (in)	Percent Compaction	Min Comp. (%)	Remark
9		04/24/25	Trench Backfill		CL/CH	15.6	104.7	14.5	104.7	119.9	12	100.0	98	DP/MP

Test Information

Test #	Test Location	Elevation	Reference	Gauge Specs Make / Model / SN / Calibrated	Gauge Standardization Density Standard/Moisture Standard	Field Technician
9	Trench Backfill: 6x5 Concrete Box Sta. 36+50 1st Lift			Instrotek / 3500 Xplorer / 3727 / 01/20/2025	2460 / 681	Omar Zarate

Remarks	Comments
DP/MP: Density Pass / Moisture Pass	Tests are "Direct Transmission" (Method A) unless probe depth is noted as "Backscatter". Gauge calibration data on file with the testing agency. **9:** Inspector Kino G. was present.

Respectfully Submitted by B2Z Engineering

STATE OF TEXAS
OLIVER F. SALGADO
103749
LICENSED PROFESSIONAL ENGINEER

Oliver Salgado, P.E., Senior Project Manager

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B2Z ENGINEERING

Soil Nuclear Gauge

B2Z Report No. NL-8D
Report Date: 04/25/2025
Test Method: ASTM D 6938

Mission Office
900 S Stewart Rd, Ste. 2
Mission, TX 78572
Phone: 956-585-3773

Client:
Hidalgo County Precinct No. 2
300 W Hall Acres, Ste. G
Pharr, TX 78577

Project:
2322
Nolana Loop CEI
various
McAllen, TX

Test Results

Test #	Retest Of	Test Date	Proctor ID	Method	Soil Classification	Optimum Moisture (%)	Maximum Dry Density (pcf)	In Place Moisture (%)	In Place Dry Density (pcf)	In Place Wet Density (pcf)	Probe Depth (in)	Percent Compaction	Min Comp. (%)	Remark
10		04/24/25	Trench Backfill		CL/CH	15.6	104.7	17.4	105.5	123.9	12	100.8	98	DP/MP

Test Information

Test #	Test Location	Elevation	Reference	Gauge Specs Make / Model / SN / Calibrated	Gauge Standardization Density Standard/Moisture Standard	Field Technician
10	Trench Backfill: 6x5 Concrete Box Sta. 36+80 2nd Lift			Instrotek / 3500 Xplorer / 3727 / 01/20/2025	2460 / 681	Omar Zarate

Remarks	Comments
DP/MP: Density Pass / Moisture Pass	Tests are "Direct Transmission" (Method A) unless probe depth is noted as "Backscatter". Gauge calibration data on file with the testing agency. **10:** Inspector Kino G. was present.

Respectfully Submitted by B2Z Engineering

STATE OF TEXAS
OLIVER F. SALGADO
103749
LICENSED PROFESSIONAL ENGINEER

Oliver Salgado, P.E., Senior Project Manager

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B2Z ENGINEERING

Soil Nuclear Gauge

B2Z Report No. NL-9D
Report Date: 04/25/2025
Test Method: ASTM D 6938

Mission Office
900 S Stewart Rd, Ste. 2
Mission, TX 78572
Phone: 956-585-3773

Client:
Hidalgo County Precinct No. 2
300 W Hall Acres, Ste. G
Pharr, TX 78577

Project:
2322
Nolana Loop CEI
various
McAllen, TX

Test Results

Test #	Retest Of	Test Date	Proctor ID	Method	Soil Classification	Optimum Moisture (%)	Maximum Dry Density (pcf)	In Place Moisture (%)	In Place Dry Density (pcf)	In Place Wet Density (pcf)	Probe Depth (in)	Percent Compaction	Min Comp. (%)	Remark
11		04/24/25	Trench Backfill		CL/CH	15.6	104.7	19.0	100.0	119.0	12	95.5	98	DF/MF

Test Information

Test #	Test Location	Elevation	Reference	Gauge Specs Make / Model / SN / Calibrated	Gauge Standardization Density Standard/Moisture Standard	Field Technician
11	Trench Backfill: 6x5 Concrete Box Sta. 36+60 Final Lift			Instrotek / 3500 Xplorer / 3727 / 01/20/2025	2460 / 681	Omar Zarate

Remarks	Comments
DF/MF: Density Fail / Moisture Fail	Tests are "Direct Transmission" (Method A) unless probe depth is noted as "Backscatter". Gauge calibration data on file with the testing agency.

Respectfully Submitted by B2Z Engineering

STATE OF TEXAS
OLIVER F. SALGADO
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Oliver Salgado, P.E., Senior Project Manager

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Mission Office
900 S Stewart Rd, Ste. 2
Mission, TX 78572
Phone: 956-585-3773

Soil Nuclear Gauge

B2Z Report No. NL-10D
Report Date: 04/28/2025
Test Method: ASTM D 6938

Client:
Hidalgo County Precinct No. 2
300 W Hall Acres, Ste. G
Pharr, TX 78577

Project:
2322
Nolana Loop CEI
various
McAllen, TX

Test Results

Test #	Retest Of	Test Date	Proctor ID	Method	Soil Classification	Optimum Moisture (%)	Maximum Dry Density (pcf)	In Place Moisture (%)	In Place Dry Density (pcf)	In Place Wet Density (pcf)	Probe Depth (in)	Percent Compaction	Min Comp. (%)	Remark
12	11	04/25/25	Trench Backfill		CL/CH	15.6	104.7	15.4	103.8	119.8	12	99.1	98	DP/MP

Test Information

Test #	Test Location	Elevation	Reference	Gauge Specs Make / Model / SN / Calibrated	Gauge Standardization Density Standard/Moisture Standard	Field Technician
12	Trench Backfill: 6x5 Concrete Box Sta. 36+80 Final Lift			Instrotek / 3500 Xplorer / 3727 / 01/20/2025	2460 / 681	Omar Zarate

Remarks	Comments
DP/MP: Density Pass / Moisture Pass	Tests are "Direct Transmission" (Method A) unless probe depth is noted as "Backscatter". Gauge calibration data on file with the testing agency.

Respectfully Submitted by B2Z Engineering

STATE OF TEXAS
OLIVER F. SALGADO
103749
LICENSED PROFESSIONAL ENGINEER

Oliver Salgado, P.E., Senior Project Manager

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B2Z ENGINEERING

Soil Nuclear Gauge

B2Z Report No. NL-11D
Report Date: 04/28/2025
Test Method: ASTM D 6938

Mission Office
900 S Stewart Rd, Ste. 2
Mission, TX 78572
Phone: 956-585-3773

Client:
Hidalgo County Precinct No. 2
300 W Hall Acres, Ste. G
Pharr, TX 78577

Project:
2322
Nolana Loop CEI
various
McAllen, TX

Test Results

Test #	Retest Of	Test Date	Proctor ID	Method	Soil Classification	Optimum Moisture (%)	Maximum Dry Density (pcf)	In Place Moisture (%)	In Place Dry Density (pcf)	In Place Wet Density (pcf)	Probe Depth (in)	Percent Compaction	Min Comp. (%)	Remark
13		04/25/25	Trench Backfill		CL/CH	15.6	104.7	15.3	106.9	123.3	12	102.1	98	DP/MP

Test Information

Test #	Test Location	Elevation	Reference	Gauge Specs Make / Model / SN / Calibrated	Gauge Standardization Density Standard/Moisture Standard	Field Technician
13	Trench Backfill: 6x5 Concrete Box Sta. 33+56 1st Lift			Instrotek / 3500 Xplorer / 3727 / 01/20/2025	2460 / 681	Omar Zarate

Remarks	Comments
DP/MP: Density Pass / Moisture Pass	Tests are "Direct Transmission" (Method A) unless probe depth is noted as "Backscatter". Gauge calibration data on file with the testing agency.

Respectfully Submitted by B2Z Engineering

STATE OF TEXAS
OLIVER F. SALGADO
103749
LICENSED PROFESSIONAL ENGINEER

Oliver Salgado, P.E., Senior Project Manager

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B2Z ENGINEERING

Soil Nuclear Gauge

B2Z Report No. NL-12D
Report Date: 04/28/2025
Test Method: ASTM D 6938

Mission Office
900 S Stewart Rd, Ste. 2
Mission, TX 78572
Phone: 956-585-3773

Client:
Hidalgo County Precinct No. 2
300 W Hall Acres, Ste. G
Pharr, TX 78577

Project:
2322
Nolana Loop CEI
various
McAllen, TX

Test Results

Test #	Retest Of	Test Date	Proctor ID	Method	Soil Classification	Optimum Moisture (%)	Maximum Dry Density (pcf)	In Place Moisture (%)	In Place Dry Density (pcf)	In Place Wet Density (pcf)	Probe Depth (in)	Percent Compaction	Min Comp. (%)	Remark
14		04/28/25	Trench Backfill		CL/CH	15.6	104.7	14.7	107.4	123.2	12	102.6	98	DP/MP
15		04/28/25	Trench Backfill		CL/CH	15.6	104.7	15.4	106.8	123.3	12	102.0	98	DP/MP

Test Information

Test #	Test Location	Elevation	Reference	Gauge Specs Make / Model / SN / Calibrated	Gauge Standardization Density Standard/Moisture Standard	Field Technician
14	Trench Backfill: 6x5 Concrete Box Sta. 35+00 3rd Lift			Instrotek / 3500 Xplorer / 4015 / 01/21/2025	2222 / 700	Alvaro Robles Jr.
15	Trench Backfill: 6x5 Concrete Box Sta. 35+00 2nd Lift			Instrotek / 3500 Xplorer / 4015 / 01/21/2025	2222 / 700	Alvaro Robles Jr.

Remarks	Comments
DP/MP: Density Pass / Moisture Pass	Tests are "Direct Transmission" (Method A) unless probe depth is noted as "Backscatter". Gauge calibration data on file with the testing agency.

STATE OF TEXAS
OLIVER F. SALGADO
103749
LICENSED PROFESSIONAL ENGINEER

Respectfully Submitted by B2Z Engineering

Oliver Salgado, P.E., Senior Project Manager

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B2Z ENGINEERING

Soil Nuclear Gauge

B2Z Report No. NL-13D
Report Date: 05/05/2025
Test Method: ASTM D 6938

Mission Office
900 S Stewart Rd, Ste. 2
Mission, TX 78572
Phone: 956-585-3773

Client:
Hidalgo County Precinct No. 2
300 W Hall Acres, Ste. G
Pharr, TX 78577

Project:
2322
Nolana Loop CEI
various
McAllen, TX

Test Results

Test #	Retest Of	Test Date	Proctor ID	Method	Soil Classification	Optimum Moisture (%)	Maximum Dry Density (pcf)	In Place Moisture (%)	In Place Dry Density (pcf)	In Place Wet Density (pcf)	Probe Depth (in)	Percent Compaction	Min Comp. (%)	Remark
16		05/01/25	Trench Backfill		CL/CH	15.6	104.7	17.7	105.5	124.2	12	100.8	98	DP/MP

Test Information

Test #	Test Location	Elevation	Reference	Gauge Specs Make / Model / SN / Calibrated	Gauge Standardization Density Standard/Moisture Standard	Field Technician
16	Trench Backfill: 42" RCP Sta. 51+00 1st Lift			Instrotek / 3500 Xplorer / 4015 / 01/21/2025	2212 / 701	Alvaro Robles Jr.

Remarks	Comments
DP/MP: Density Pass / Moisture Pass	Tests are "Direct Transmission" (Method A) unless probe depth is noted as "Backscatter". Gauge calibration data on file with the testing agency. **16:** Inspector Stanley Ramos was present.

Respectfully Submitted by B2Z Engineering

STATE OF TEXAS
OLIVER F. SALGADO
103749
LICENSED PROFESSIONAL ENGINEER

Oliver Salgado, P.E., Senior Project Manager

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B2Z ENGINEERING

Soil Nuclear Gauge

B2Z Report No. NL-14D
Report Date: 05/05/2025
Test Method: ASTM D 6938

Mission Office
900 S Stewart Rd, Ste. 2
Mission, TX 78572
Phone: 956-585-3773

Client:
Hidalgo County Precinct No. 2
300 W Hall Acres, Ste. G
Pharr, TX 78577

Project:
2322
Nolana Loop CEI
various
McAllen, TX

Test Results

Test #	Retest Of	Test Date	Proctor ID	Method	Soil Classification	Optimum Moisture (%)	Maximum Dry Density (pcf)	In Place Moisture (%)	In Place Dry Density (pcf)	In Place Wet Density (pcf)	Probe Depth (in)	Percent Compaction	Min Comp. (%)	Remark
17		05/01/25	Trench Backfill		CL/CH	15.6	104.7	16.5	106.4	123.9	12	101.6	98	DP/MP

Test Information

Test #	Test Location	Elevation	Reference	Gauge Specs Make / Model / SN / Calibrated	Gauge Standardization Density Standard/Moisture Standard	Field Technician
17	Trench Backfill: 42" RCP Sta. 51+00 2nd Lift			Instrotek / 3500 Xplorer / 4015 / 01/21/2025	2212 / 701	Alvaro Robles Jr.

Remarks	Comments
DP/MP: Density Pass / Moisture Pass	Tests are "Direct Transmission" (Method A) unless probe depth is noted as "Backscatter". Gauge calibration data on file with the testing agency. **17:** Inspector Kino Gonzalez was present.

Respectfully Submitted by B2Z Engineering

STATE OF TEXAS
OLIVER F. SALGADO
103749
LICENSED PROFESSIONAL ENGINEER

Oliver Salgado, P.E., Senior Project Manager

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B2Z ENGINEERING

Mission Office
900 S Stewart Rd, Ste. 2
Mission, TX 78572
Phone: 956-585-3773

Soil Nuclear Gauge

B2Z Report No. NL-15D
Report Date: 05/05/2025
Test Method: ASTM D 6938

Client:
Hidalgo County Precinct No. 2
300 W Hall Acres, Ste. G
Pharr, TX 78577

Project:
2322
Nolana Loop CEI
various
McAllen, TX

Test Results

Test #	Retest Of	Test Date	Proctor ID	Method	Soil Classification	Optimum Moisture (%)	Maximum Dry Density (pcf)	In Place Moisture (%)	In Place Dry Density (pcf)	In Place Wet Density (pcf)	Probe Depth (in)	Percent Compaction	Min Comp. (%)	Remark
18		05/01/25	Trench Backfill		CL/CH	15.6	104.7	16.8	107.8	125.9	12	103.0	98	DP/MP

Test Information

Test #	Test Location	Elevation	Reference	Gauge Specs Make / Model / SN / Calibrated	Gauge Standardization Density Standard/Moisture Standard	Field Technician
18	Trench Backfill: 42" RCP Sta. 51+00 3rd Lift			Instrotek / 3500 Xplorer / 4015 / 01/21/2025	2212 / 701	Alvaro Robles Jr.

Remarks	Comments
DP/MP: Density Pass / Moisture Pass	Tests are "Direct Transmission" (Method A) unless probe depth is noted as "Backscatter". Gauge calibration data on file with the testing agency. **18:** Inspector Kino Gonzalez was present.

Respectfully Submitted by B2Z Engineering

STATE OF TEXAS
OLIVER F. SALGADO
103749
LICENSED PROFESSIONAL ENGINEER

Oliver Salgado, P.E., Senior Project Manager

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B2Z ENGINEERING

Mission Office
900 S Stewart Rd, Ste. 2
Mission, TX 78572
Phone: 956-585-3773

Soil Nuclear Gauge

B2Z Report No. NL-16D
Report Date: 05/09/2025
Test Method: ASTM D 6938

Client:
Hidalgo County Precinct No. 2
300 W Hall Acres, Ste. G
Pharr, TX 78577

Project:
2322
Nolana Loop CEI
various
McAllen, TX

Test Results

Test #	Retest Of	Test Date	Proctor ID	Method	Soil Classification	Optimum Moisture (%)	Maximum Dry Density (pcf)	In Place Moisture (%)	In Place Dry Density (pcf)	In Place Wet Density (pcf)	Probe Depth (in)	Percent Compaction	Min Comp. (%)	Remark
19		05/07/25	Trench Backfill		CL/CH	15.6	104.7	16.1	105.1	122.0	12	100.4	98	DP/MP

Test Information

Test #	Test Location	Elevation	Reference	Gauge Specs Make / Model / SN / Calibrated	Gauge Standardization Density Standard/Moisture Standard	Field Technician
19	Trench Backfill: 6x5 Culvert Box Sta. 37+57.93 1st Lift			Instrotek / 3500 Xplorer / 4016 / 01/20/2025	2189 / 731	Ramiro Cantu

Remarks	Comments
DP/MP: Density Pass / Moisture Pass	Tests are "Direct Transmission" (Method A) unless probe depth is noted as "Backscatter". Gauge calibration data on file with the testing agency.

Respectfully Submitted by B2Z Engineering

STATE OF TEXAS
OLIVER F. SALGADO
103749
LICENSED PROFESSIONAL ENGINEER

Oliver Salgado, P.E., Senior Project Manager

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B2Z ENGINEERING

Soil Nuclear Gauge

B2Z Report No. NL-17D
Report Date: 05/09/2025
Test Method: ASTM D 6938

Mission Office
900 S Stewart Rd, Ste. 2
Mission, TX 78572
Phone: 956-585-3773

Client:
Hidalgo County Precinct No. 2
300 W Hall Acres, Ste. G
Pharr, TX 78577

Project:
2322
Nolana Loop CEI
various
McAllen, TX

Test Results

Test #	Retest Of	Test Date	Proctor ID	Method	Soil Classification	Optimum Moisture (%)	Maximum Dry Density (pcf)	In Place Moisture (%)	In Place Dry Density (pcf)	In Place Wet Density (pcf)	Probe Depth (in)	Percent Compaction	Min Comp. (%)	Remark
20		05/07/25	Trench Backfill		CL/CH	15.6	104.7	16.4	105.2	122.5	12	100.5	98	DP/MP

Test Information

Test #	Test Location	Elevation	Reference	Gauge Specs Make / Model / SN / Calibrated	Gauge Standardization Density Standard/Moisture Standard	Field Technician
20	Trench Backfill: 6x5 Culvert Box Sta. 39+22.93 2nd Lift			Instrotek / 3500 Xplorer / 4016 / 01/20/2025	2189 / 731	Ramiro Cantu

Remarks	Comments
DP/MP: Density Pass / Moisture Pass	Tests are "Direct Transmission" (Method A) unless probe depth is noted as "Backscatter". Gauge calibration data on file with the testing agency. **20:** Inspector Kino Gonzalez was present.

Respectfully Submitted by B2Z Engineering

STATE OF TEXAS
OLIVER F. SALGADO
103749
LICENSED PROFESSIONAL ENGINEER

Oliver Salgado, P.E., Senior Project Manager

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B2Z ENGINEERING

Soil Nuclear Gauge

B2Z Report No. NL-18D
Report Date: 05/09/2025
Test Method: ASTM D 6938

Mission Office
900 S Stewart Rd, Ste. 2
Mission, TX 78572
Phone: 956-585-3773

Client:
Hidalgo County Precinct No. 2
300 W Hall Acres, Ste. G
Pharr, TX 78577

Project:
2322
Nolana Loop CEI
various
McAllen, TX

Test Results

Test #	Retest Of	Test Date	Proctor ID	Method	Soil Classification	Optimum Moisture (%)	Maximum Dry Density (pcf)	In Place Moisture (%)	In Place Dry Density (pcf)	In Place Wet Density (pcf)	Probe Depth (in)	Percent Compaction	Min Comp. (%)	Remark
21		05/07/25	Trench Backfill		CL/CH	15.6	104.7	17.2	105.6	123.8	12	100.9	98	DP/MP

Test Information

Test #	Test Location	Elevation	Reference	Gauge Specs Make / Model / SN / Calibrated	Gauge Standardization Density Standard/Moisture Standard	Field Technician
21	Trench Backfill: 6x5 Culvert Box Sta. 37+57.93 3rd Lift			Instrotek / 3500 Xplorer / 4016 / 01/20/2025	2189 / 731	Ramiro Cantu

Remarks	Comments
DP/MP: Density Pass / Moisture Pass	Tests are "Direct Transmission" (Method A) unless probe depth is noted as "Backscatter". Gauge calibration data on file with the testing agency. **21:** Inspector Kino Gonzalez was present.

Respectfully Submitted by B2Z Engineering

STATE OF TEXAS
OLIVER F. SALGADO
103749
LICENSED PROFESSIONAL ENGINEER

Oliver Salgado, P.E., Senior Project Manager

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B2Z ENGINEERING
Mission Office
900 S Stewart Rd, Ste. 2
Mission, TX 78572
Phone: 956-585-3773

Subcontracted Testing

Client:	**Project:**
Hidalgo County Precinct No. 2 300 W Hall Acres, Ste. G Pharr, TX 78577	2322 Nolana Loop CEI various McAllen, TX

General Information

Sample Date: 03/12/2025	**Sample Number:** 8386
Sampled From: Truck At Plant	**Sample Type:** Type D
Technician: Jorge Gallardo	**Location Details:** Synolo plant

Testing Information

Testing Performed by Subcontractor:

Asphalt Binder Testing results received from Atlas. Report No. 45252

Note: See attached report provided by Subcontractor.

Test Completed Date: 05/14/2025

Respectfully Submitted by B2Z Engineering

STATE OF TEXAS
OLIVER F. SALGADO
103749
LICENSED PROFESSIONAL ENGINEER

Oliver Salgado, P.E., Senior Project Manager

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ATLAS
3989 Highway 290 East
Dripping Springs, Texas 78620
512-858-2993

Client: B2Z Engineering
Attn: Jorge Solis

Report No: 45252
Date: 5/14/2025

Report of: Asphalt Binder Testing

Sample ID: Nolana Loop Detour Texas Cordia
Sampled By: Client
Sample Location: From Truck (BOL: 3076-6068)
Producer: Texas Cordia
Material Description: PG 64-22

Lab No: 250821
Production/ Sampled Date: 3/12/2025
Project No: 0921-02-361
Received Date: 4/29/2025
Test Performed By: Colton Summers, CET

DATA/RESULTS:

PROPERTIES		TEST METHODS TXDOT	TEST METHODS AASHTO	SPECIFICATIONS		RESULTS
ASPHALT MATERIAL AS-RECEIVED						
TxDOT Item 300 Table 17 Requirements				Min - Max		
Specific Gravity		508-C	T 228	60°F		1.0382
				77°F		1.0322
Flash Point, COC, °F		504-C	T 48	-	-	
Viscosity, Pa-s	135°C	-	T 316	-	-	
ODSR, G*/SinΔ, kPa	64°C	-	T 315	1.00	2.00	1.7991
Elastic Recovery, %	50°F	539-C	T 51	-	-	
RTFO RESIDUE						
Mass Change, %		541-C	T 240	-	-	
RTFO DSR, G*/SinΔ, kPa	64°C	-	T 315	2.20	5.00	4.9643
MSCR, % Recovery, kPa	64°C	-	T 350	-	-	
PRESSURE AGING RESIDUE (100C, 300 psi, 20 hr.)			R 28			
PAV DSR, G*/SinΔ, kPa	25°C	-	T 315	-	5000	3250
Creep Stiffness – Stiffness	-12°C	-	T 313	-	300	113
Creep Stiffness – m-value	-12°C	-	T 313	0.300	-	0.309

DISCUSSION: All Test Results meet specifications.

STATE OF TEXAS
JOE L. FIELLO
125525
LICENSED
PROFESSIONAL ENGINEER
ATLAS TECHNICAL CONSULTANTS
F-19813

Reviewed by: Joe Fiello
Atlas Technical Consultants LLC
Firm Registration No. F-19813

The results shown on this report are for the exclusive use of the client for whom they were obtained and apply only to the samples tested and/or inspected. Atlas Technical Consultants assumes no responsibility nor makes a performance or warranty statement for this material or products and processes containing the material connected to this report.

Compressive Strength of Concrete

Test Method:

B2Z Report No. NL-1C
Report Date: 04/23/2025
Sample: 8542

Mission Office
900 S Stewart Rd, Ste. 2
Mission, TX 78572
Phone: 956-585-3773

Client:
Hidalgo County Precinct No. 2
300 W Hall Acres, Ste. G
Pharr, TX 78577

Project:
2322
Nolana Loop CEI
various
McAllen, TX

Sample Details

Set #:	1	**Technician:**	Jacob Chavez	**Batched:**	09:36 CDT
Specimen Size:	4 x 8 Cast Cylinder	**Cast By:**	Jacob Chavez	**Sampled:**	10:30 CDT
Specimens In Set:	3	**Date Cast:**	03/25/25	**Cast:**	10:40 CDT
Truck / Ticket #:	S106 / 8785	**Sampled From:**	Chute	**Truck Empty:**	11:01 CDT
Contractor:	Texas Codia	**Placement Method:**	Chute	**Placement Time:**	85 (min)

Location

Placement Location: Other
Location Details: Collar on 60 inch RCP
West Bound Nolana
Sample Location / Notes: Sta. 15+75

Batch Log

Supplier: Synolo
Mix Design: TXDOT Class A
On-Site Admixtures: None

Specifications

Strength: 3000 (psi)

Field Measurements

Weather:	Mostly Cloudy	**Slump (in):**	5	**Plastic Unit Weight:**	
Air Temperature (F):	74	**Concrete Temp (F):**	85	**Air Content:**	1.2
				Load Volume:	5.00 (yd³)

Standard Cure

Min / Max Temp (F): 67/91
Initial Cure Method: Plastic Cover/Lid/Blanket
Final Cure Method: Water Storage Tank

Field Cure

Lab Test Results

Testing Lab: B2Z Mission Lab, 900 S. Stewart Rd., Suite 2, Mission, TX, 78572

Specimen Number	Test Age Days	Test Date	Field / Lab Cure Days	Average Cylinder Diameter (in)	Cylinder Area (in²)	Max Load (lbs)	Strength (psi)	Fracture Type	Break Remark	Capping Method
1-1	7	04/01/25	1 / 6	4.00	12.57	44,110	3,510	3	R3	1
1-2	28	04/22/25	1 / 27	4.00	12.57	53,260	4,240	3	R8	1
1-3	28	04/22/25	1 / 27	4.00	12.57	57,158	4,550	3	R8	1

Test Age Average Strengths (psi): 7 Day - **3510**, 28 Day - **4390**

R3: The 7 day test results meets or exceeds the 28 day specified strength.
R8: The 28 day test results meets specified strength.
Tested By: Jaykob Quintanilla (1,2,3)
Checked In : 03/26/2025 (1,2,3)

Capping Methods

1: Neoprene Pad

TYPE 1 TYPE 2 TYPE 3 TYPE 4 TYPE 5 TYPE 6

Respectfully Submitted by B2Z Engineering

STATE OF TEXAS
OLIVER F. SALGADO
103749
LICENSED PROFESSIONAL ENGINEER

Oliver Salgado, P.E., Senior Project Manager

Test Methods (As Applicable): ASTM C31; ASTM C39; ASTM C138; ASTM C143; ASTM C172: ASTM C231; ASTM C1064; ASTM C1231; ASTM D558 Method A; ASTM D1633

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Purchase Order
COUNTY OF HIDALGO

PO# 888404

DATE: 10/29/2024

PO TYPE: NULL

VENDOR: 449121 REQ: 00504711

PHONE: (956)585-3773

Fax: (956)583-7116 EMAIL: Reza@B2ZEng.com

B2Z ENGINEERING, LLC
900 S. STEWART RD. SUITE 4
MISSION TX 78572

BUYER: COMMISSIONER, PRECINCT 2 PO

SHIP TO: HIDALGO CO. PCT 2
300 WEST HALL ACRES, SUITE G
PHARR TX 78577

VENDOR ACCOUNT:

CONTACT: EDUARDO CANTU (956)787-1891

SITE: COMMISSIONER, PRECINCT 2

CONTRACT: C-24-0118-10-01

SPECIAL INSTRUCTIONS:

VENDOR NOTES

1. Do not add to, or alter this Purchase Order. This Order is not renewable.
2. TAX EXEMPTION: This Purchase Order may be accepted in lieu of Exemption Certificate.
3. This Order is also placed F.O.B. Destination. Vendor must repay all shipping costs.
4. Invoice each Purchase Order singly. Original invoices are required customer copy may be accepted. Out number must appear on all invoices, bills of lading, and packages.
5. Payment will be made only for bona fide and full completed orders, unless otherwise attached.

QTY	UOM	DESCRIPTION	UNIT PRICE	AMOUNT
		DO NOT DUPLICATE ORDER TXDOT PCT 2 NOLANA LOOP ROAD PROJECT (FROM 1426 (RAUL LONGORIA RD.) TO FM 907 (ALAMO RD) - ENGINEERING SERVICES WORK AUTHORIZATION#1 APPROVED BY CC 10/01/24 AI#96872 AFA APPROVED BY CC 11/26/2019 AI#73414 AFA AMENDMENT NO. 1 APPROVED BY CC 12/20/2022 AI#88870 AFA AMENDMENT NO. 2 APPROVED BY CC 5/2/2023 AI#90722 ICA WITH HCDD#1 APPROVED BY CC 6/20/2024 AI#95762 TOTAL WORK AUTHORIZATION NO. 1 IS FOR $1,999,632.04 AS PER AFA, TXDOT PORTION OF CONSTRUCTION ENGINEERING & INSPECTION (CEI) IS $1,855,561.39 (FEDERAL) PARTICIPATION IS $1,536,696.80, STATE PARTICIPATION IS $318,864.59 AND COUNTY PARTICIPATION IS $144,070.65		
1.00	LOT	CC WORK AUTHORIZATION NO. 1 FOR ENGINEER TO PROVIDE CONSTRUCTION CONTRACT ADMINISTRATION, CONSTRUCTION MANAGEMENT & INSPECTION, CONSTRUCTION MATERIAL TESTING AND MISCELLANEOUS TECHNICAL ACTIVITIES NEEDED FOR NOLANA LOOP PROJECT FROM FM 1426 (RAUL LONGORIA RD) TO FM 907 (ALAMO RD) WITHIN HIDALGO COUNTY PRECINCT 2	144,070.6500	144,070.65
1.00		PO LIQUIDATION INV#20463 PD DIRECT W/CK#04-024687 B#001173 RC 3/27/25	0.0000	0.00
1.00		PO LIQUIDATION INV#20463 PD DIRECT W/CK#04-024687 B#001173 RC 3/27/25	0.0000	0.00
		TOTAL:		144,070.65
		REPORT ROAD HAZARDS 1-866-HCR-SAFE OR 1-866-427-7233		
		********** For Hidalgo County use only		
		5-1315-431-00-122-136-0-721 57,628.26		
		5-1315-431-00-122-136-0-841 86,442.39		

Authorized by: Ignacio Amezcua