MATERIALS TESTING
ASPHALT ROADWAYS

FOR
STONE GARDEN UNIT 2A
SAN ANTONIO, TEXAS

December 3, 2025

PREPARED BY:

December 3, 2025

Lennar Homes of Texas Land & Construction, LTD.
100 NE Loop 410, Ste. 1155
San Antonio, TX 78216

Attn: Mr. Nathan Nowell
nathan.nowell@lennar.com

ECS Project No.: 20-1910

Re: ECS Testing Summary for Asphalt Roadways
Stone Garden Unit 2A
14395 Old Corpus Christi Road
Elmendorf, Texas 78112

Dear Mr. Nowell:

ECS Southwest, LLP (ECS) is pleased to submit our testing summary for sewer and water trench backfill compaction testing for the Stone Garden Unit 2A. Our services were authorized via ECS Proposal 20-2188 dated 02/1/2024. Service commenced on 3/25/2024. Testing was scheduled by V.K. Knowlton, the sitework subcontractor on an as needed basis for the below referenced area. Testing was completed on 11/13/2025.

Location: Street	Stations Included
Augite Cove	1+00.00 to 5+39.91
Basalts Garden	1+00.00 to 3+44.23
Dacite Place	1+00.00 to 5+92.95
Fiore Garden	1+00.00 to 6+05.53
Gabbro Cove	1+00.00 to 5+25.45
Giallo Place	1+00.00 to 3+12.10
Granite Garden	1+00.00 to 13+39.09
Hornblende Trails	1+00.00 to 7+18.91
Quartz Cove	1+00.00 to 14+41.31
Azzurro Stone	1+00.00 to 14+06.14
Chalk Cave	1+00.00 to 15+31.53
Mudstone Place	1+00.00 to 9+93.36

As the quality control inspector, and with respect to the inspections listed below for this project during construction, on a call out as need basis, to the best of my information, knowledge, and belief, the listed required inspections and tests for this project have been performed to the extent ECS Southwest, LLP was requested onsite for inspections and discovered discrepancies have been resolved for the testing performed by ECS Southwest, LLP.

ECS Southwest, LLP is pleased to have been a part of the third-party quality control team for Lennar Homes. If you have any questions or concerns regarding the testing performed by ECS Southwest, LLP, please contact us at your earliest convenience.

Respectfully submitted,
ECS Southwest, LLP

Adam Heiman

Adam Heiman, P.E.
Principal Engineer

TESTING REPORT SUMMARY

ASPHALT ROADWAYS

TX Registered Firm # F-8461

ECS Southwest, LLP
431 Isom Road, Suite 114
San Antonio, TX 78216
T 210.528.1430
F 214.483.9684

LETTER OF TRANSMITTAL

August 15, 2025
Lennar
100 NE Loop 410 Suite 1155
San Antonio, TX 78216

ATTN: Mr. Nathan Nowell

RE: **Stone Garden - Unit 2A**
ECS Job # **20:1910**

Permits:
Location: **14395 Old Corpus Christi Road**
Elmendorf, TX 78112

X Field Reports **X** For your use **X** As requested

CC: Lennar - Rogelio "Roy" Olivarez, Jr.

ENCL: Field Report # 81 8/14/2025 Lime Gradations/ Soil Pick up

Adam James Heiman, P.E.
Assistant Office Manager

Stephanie Marie Chavez
CMT Project Professional I

TX Registered Engineering Firm # F-8461

ECS Southwest, LLP
431 Isom Road, Suite 114
San Antonio, TX 78216
T 210.528.1430
F 214.483.9684

FIELD REPORT

Project	**Stone Garden - Unit 2A**
Location	**Elmendorf, TX**
Client	**Lennar**
Contractor	**Lennar**

Project No.	**20:1910**
Report No.	**81**
Day & Date	**Thursday 8/14/2025**
Weather	**94 °/ Partly Cloudy**
On-Site Time	**1.50**
Lab Time	**0.75**
Travel Time*	**0.50**
Total	**2.75**
Re Obs Time	**0.00**

Remarks **Lime Gradations/ Soil Pick up**

Trip Charges*	Tolls/Parking*	Mileage*	Time of	Arrival	Departure
35.00					
Chargeable Items				**11:15A**	**12:45P**

* Travel time and mileage will be billed in accordance with the contract.

Summary of Services Performed (field test data, locations, elevations & depths are estimates) & Individuals Contacted.

The undersigned arrived on-site, as requested to perform gradations for the lime treated subgrade for Quartz Cove and Dacite Place. Please see the attached sketch.

The applicable plans and geotechnical report were reviewed prior to testing. TxDOT Item 260 was performed for lime treated subgrade gradations. Sieve gradations appeared to meet the specifications.

While on site, as requested, the undersigned obtained 3 samples of lime treated subgrade material for testing in our laboratory. The sample was obtained from the processed lime treated subgrade.

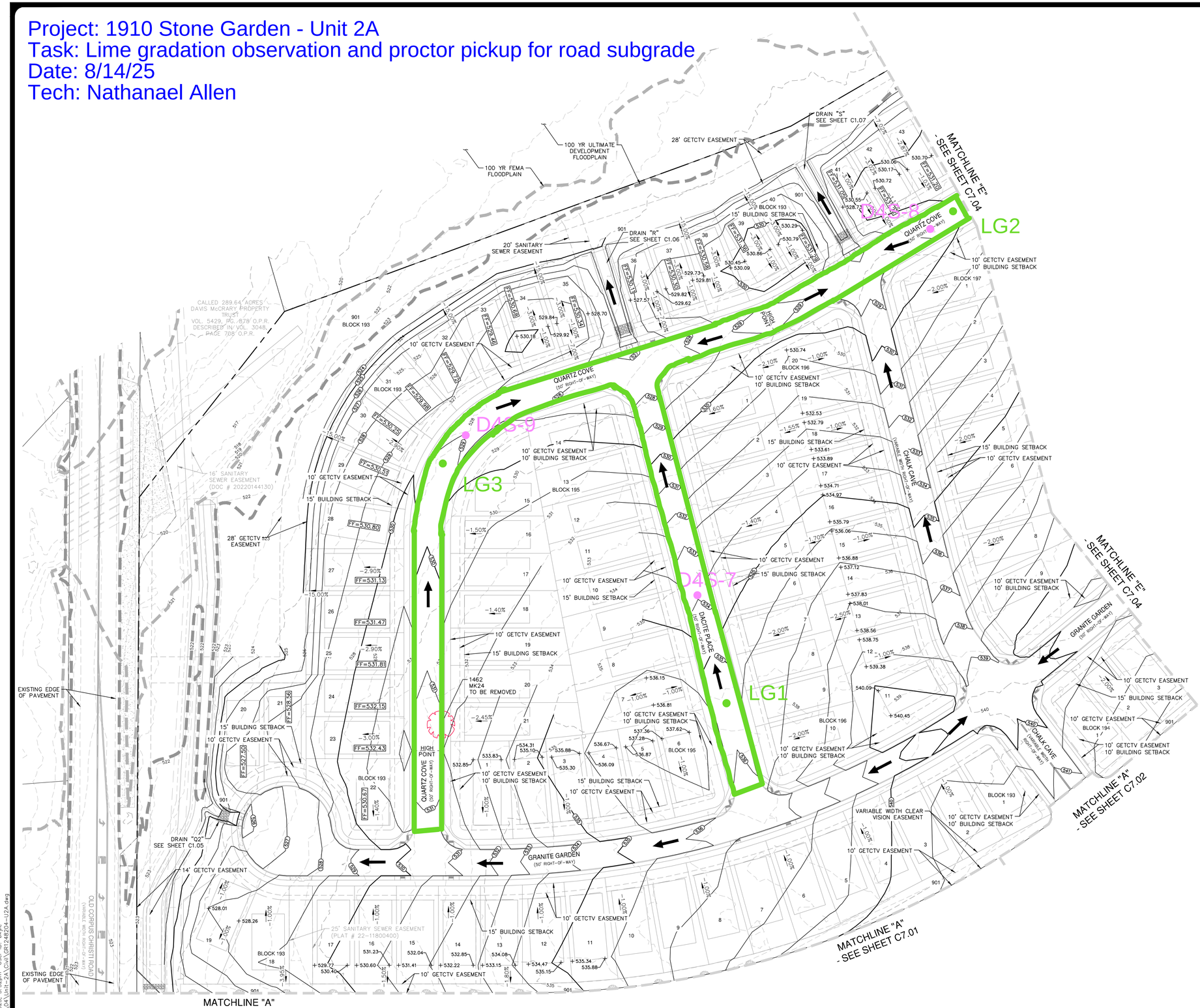
Locations:
Dacite Place near station 2+50
Quartz Cove near stations 5+00 and 12+00

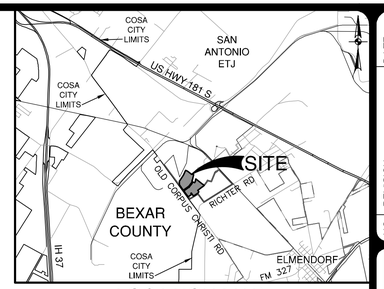
The three (3) samples were obtained and approximately 2 buckets of each of the material was obtained and returned to the laboratory for testing.

Prior to departure, Vence Arriaga with V.K. Knowlton was informed of the results of the day's observations.

By Nathan Allen 1700

Project: 1910 Stone Garden - Unit 2A
Task: Lime gradation observation and proctor pickup for road subgrade
Date: 8/14/25
Tech: Nathanael Allen





LOCATION MAP
NOT-TO-SCALE

SCALE: 1"= 50'
0' 50' 100' 150'

GRADING LEGEND

PROJECT LIMITS	
100 YR FLOODPLAIN	
EXISTING CONTOUR	976
PROPOSED CONTOUR	970
FLOW ARROW (EXISTING)	
FLOW ARROW (PROPOSED)	
MINIMUM FINISHED FLOOR ELEVATION	FF = XXXX.XX
TREES TO REMAIN	
TREES TO BE REMOVED	
VEHICULAR NON ACCESS EASEMENT	VNAE

GRADING NOTES:

1. ALL MATERIALS AND CONSTRUCTION PROCEDURES WITHIN THIS SCOPE OF WORK WHERE NOT SPECIFICALLY COVERED IN THE SPECIFICATIONS OR GEOTECHNICAL REPORT SHALL CONFORM TO ALL APPLICABLE CITY, COUNTY AND TXDOT STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION (LATEST EDITION).

2. SITE PREPARATION, GRADING, EXCAVATION AND FILL SHALL BE PERFORMED IN ACCORDANCE WITH THE PROJECT GEOTECHNICAL REPORT AND SPECIFICATIONS.

3. ALL SELECT FILL MATERIAL PROVIDED SHALL BE APPROVED BY THE GEOTECHNICAL ENGINEER PRIOR TO PLACING AND COMPACTING.

4. ALL ELEVATIONS AND PROPOSED CONTOURS SHOWN ON THIS GRADING PLAN REFLECT FINISHED GRADES. THE THICKNESS OF PAVING, BASE, GRASS, TOPSOIL, AND MULCH MUST BE SUBTRACTED TO OBTAIN SUBGRADE ELEVATIONS.

5. THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE ENGINEER OF ANY QUESTIONS THAT MAY ARISE CONCERNING THE INTENT, PLACEMENT, OR LIMITS OF DIMENSIONS OR GRADES NECESSARY FOR CONSTRUCTION OF THIS PROJECT.

6. THE CONTRACTOR SHALL VERIFY THE SUITABILITY OF ALL EXISTING AND PROPOSED SITE CONDITIONS INCLUDING GRADES AND DIMENSIONS BEFORE COMMENCEMENT OF CONSTRUCTION. THE ENGINEER SHALL BE NOTIFIED IMMEDIATELY OF ANY DISCREPANCIES.

7. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ACQUIRING ALL PERMITS, TESTS, APPROVALS AND ACCEPTANCES REQUIRED TO COMPLETE CONSTRUCTION OF THIS PROJECT.

8. THE CONTRACTOR SHALL REMOVE TOP SOIL, GRASS, ROOTS, DEBRIS, ETC. AND DISPOSE OFF SITE THOSE MATERIALS NOT SUITABLE FOR EMBANKMENT AND TOPSOIL. CLEAN STRIPPINGS AND TOPSOIL MAY BE STOCKPILED ON SITE FOR REUSE IN A LOCATION SPECIFIED BY THE OWNER.

9. THE SITE CONTRACTOR SHALL BE RESPONSIBLE FOR SITE STABILIZATION. ALL DISTURBED AREAS SHALL BE REVEGETATED IN ACCORDANCE WITH PROJECT SPECIFICATIONS AND TPDES/SWPPP REQUIREMENTS. REFERENCE THE LANDSCAPE ARCHITECT'S PLAN, IF APPLICABLE.

10. THE CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS (USE OF SILT FENCES, ETC.) TO KEEP DRAINAGE AND SILT FROM WASHING ONTO ADJACENT PROPERTY, STREETS, OR DRAINAGE WAYS. CONTRACTOR SHALL IMMEDIATELY REMOVE SILT/DEBRIS WHICH WASHES OFFSITE OR INTO EXISTING STORM DRAIN SYSTEMS. (SEE SWPPP PLANS & TPDES BOOK).

11. THE CONTRACTOR SHALL OBTAIN GRADES SHOWN HEREON WITHIN +/– ONE–TENTH (0.10) FOOT.

12. IN PROPOSED PAVING AREAS, STREET DESIGN PLANS SHALL CONTROL. ALL EARTHEN SLOPES SHALL BE A MAXIMUM OF 3:1 AND A MINIMUM OF 1.0% UNLESS OTHERWISE SHOWN.

13. THE CONTRACTOR SHALL PROVIDE A SMOOTH TRANSITION BETWEEN EXISTING SITE AND PROPOSED IMPROVEMENTS.

14. THE CONTRACTOR SHALL BE RESPONSIBLE FOR RESTORING TO ITS ORIGINAL, OR BETTER, CONDITION ANY DAMAGE DONE TO EXISTING TREES, BUILDINGS, UTILITIES, FENCES, PAVEMENT, CURBS, OR DRIVEWAYS (NO SEPARATE PAY ITEMS).

15. THE CONTRACTOR SHALL EXERCISE EXTREME CAUTION IN WORKING NEAR UTILITIES, GAS LINES, SEWER, OR EXISTING APPURTENANCES. PRIOR TO PERFORMING ANY EXCAVATION, CONTRACTOR SHALL CONTACT ALL UTILITY COMPANIES AND ASSURE HIMSELF THAT ALL UTILITIES HAVE BEEN ADEQUATELY LOCATED AND IDENTIFIED. THE ENGINEER SHALL BE NOTIFIED IF ANY UTILITY CONFLICTS ARE DISCOVERED.

16. UTILITIES SHOWN ON THE PLANS ARE FROM INFORMATION SOURCES AVAILABLE AT THE TIME OF DESIGN BUT MAY NOT REPRESENT ALL EXISTING UTILITIES ON SITE. THE CONTRACTOR WILL BE RESPONSIBLE FOR DETERMINING EXACT LOCATION OF ALL UTILITIES WHETHER SHOWN ON THE PLANS OR NOT. THE CONTRACTOR SHALL UNCOVER EXISTING UTILITIES PRIOR TO CONSTRUCTION AND VERIFY SIZE, GRADE AND LOCATION. THE CONTRACTOR SHALL NOTIFY THE ENGINEER IMMEDIATELY OF ANY DEVIATIONS FROM PLANS PRIOR TO BEGINNING CONSTRUCTION. ANY DAMAGE TO EXISTING UTILITIES, WHETHER SHOWN ON THE PLANS OR NOT, SHALL BE THE CONTRACTORS RESPONSIBILITY TO REPAIR, AT HIS OWN EXPENSE.

17. POSITIVE DRAINAGE SHALL BE MAINTAINED THROUGHOUT THE SCOPE OF THE PROJECT. DRAINAGE SHALL BE DIRECTED AWAY FROM ALL BUILDING FOUNDATIONS. CONTRACTOR SHOULD TAKE PRECAUTIONS NOT TO ALLOW ANY PONDING OF WATER.

18. FOR FILL PLACEMENT ON HILL SIDES OR STEEP SLOPE AREAS, THE CONTRACTOR SHALL REFERENCE THE PROJECT SPECIFICATIONS AND GEOTECHNICAL REPORT FOR SPECIAL INSTRUCTIONS REGARDING BENCHING.

19. NO WORK SHALL BE PERFORMED IN A PUBLIC RIGHT–OF–WAY WITHOUT A PERMIT.

NO.	REVISION	DATE

STATE OF TEXAS
EUGENE H. DAWSON III
112792
LICENSED
PROFESSIONAL ENGINEER
11/14/23

PAPE-DAWSON ENGINEERS
SAN ANTONIO | AUSTIN | HOUSTON | FORT WORTH | DALLAS
2000 NW LOOP 410 | SAN ANTONIO, TX 78213 | 210.375.9000
TEXAS ENGINEERING FIRM #470 | TEXAS SURVEYING FIRM #10028800

STONE GARDEN - UNIT 2A
BEXAR COUNTY, TEXAS
OVERALL GRADING PLAN

PLAT NO. 22-11800734
JOB NO. 12482-04
DATE AUGUST 2023
DESIGNER JG
CHECKED DW DRAWN TC
SHEET C7.03

Date: Nov 16, 2023, 5:32pm User ID: bkyle
File: P:\124\82\04\Unit-2A\Civil\GR\248204-U2A.dwg

Attachments

Lime mixer onsite

Figure 1

Sample D4S-7 after sampling at Dacite Place

Figure 2

Attachments

Quartz Cove near station 12+00 facing SW

Figure 3

Dacite Place appears to be mixed with lime prior to gradations and sampling

Figure 4

TX Registered Firm # F-8461

ECS Southwest, LLP
431 Isom Road, Suite 114
San Antonio, TX 78216
T 210.528.1430
F 214.483.9684

LETTER OF TRANSMITTAL

August 18, 2025
Lennar
100 NE Loop 410 Suite 1155
San Antonio, TX 78216

ATTN: Mr. Nathan Nowell

RE: **Stone Garden - Unit 2A**
ECS Job # **20:1910**

Permits:
Location: **14395 Old Corpus Christi Road**
Elmendorf, TX 78112

X	Field Reports	**X**	For your use	**X**	As requested

CC: Lennar - Rogelio "Roy" Olivarez, Jr.

ENCL: Field Report # 82 8/16/2025 Lime gradation and Lime proctor sample pick

Adam James Heiman, P.E.
Assistant Office Manager

Stephanie Marie Chavez
CMT Project Professional I

Disclaimer

1. *This report (and any attachments) shall not be reproduced except in full without prior written approval of ECS.*
2. *The information in this report relates only to the activities performed on the report date.*
3. *Where appropriate, this report includes statements as to compliance with applicable project drawings, and specifications for the activities, performed on this report date.*
4. *Incomplete or non-conforming work will be reported for future resolution.*
5. *The results of samples and/or specimens obtained or prepared for subsequent laboratory testing will be presented in separate reports/documents.*

TX Registered Engineering Firm # F-8461

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T 210.528.1430
F 214.483.9684

FIELD REPORT

Project	**Stone Garden - Unit 2A**
Location	**Elmendorf, TX**
Client	**Lennar**
Contractor	**Lennar**

Project No.	**20:1910**
Report No.	**82**
Day & Date	**Saturday 8/16/2025**
Weather	**81 °/ clear**
On-Site Time	**0.75**
Lab Time	**0.50**
Travel Time*	**1.00**
Total	**2.25**
Re Obs Time	**0.00**

Remarks **Lime gradation and Lime proctor sample pickups**

Trip Charges*	Tolls/Parking*	Mileage*	Time of	Arrival	Departure
35.00			Chargeable Items	**10:30A**	**11:15A**

* Travel time and mileage will be billed in accordance with the contract.

Summary of Services Performed (field test data, locations, elevations & depths are estimates) & Individuals Contacted.

The undersigned arrived on-site, as requested to perform gradations for the lime treated subgrade for Granite Garden and Chalk Cave. Please see the attached sketch.

The applicable plans and geotechnical report were reviewed prior to testing. TxDOT Item 260 was performed for lime treated subgrade gradations. Sieve gradations appeared to meet the specifications.

While on site, as requested, the undersigned obtained 2 samples of lime treated subgrade material for testing in our laboratory. The samples were obtained from the processed lime treated subgrade.

Locations:
Granite Garden near station 11+00
Chalk Cave near station 3+50

The two(2) samples were obtained and approximately 2 buckets of each of the material was obtained and returned to the laboratory for testing.

Prior to departure, Vince Arriaga with V.K. Knowlton was informed of the results of the day's observations.

By Ken Mauldin III 1800

Granite Garden Stabilization Field Gradation Test 1

Sieve no.	Sieve Opening (mm)	Mass of Soil retained (lb.)	Percent of mass retained (%)	Cumulative percent retained (%)	Percent finer passing (%)
1-3/4"	45.000	0.00	0.00	0.00	100.00
3/4"	19.000	0.59	5.90	5.90	94.10
#4	4.750	3.09	30.90	36.80	69.10
pan	0.00	6.39	63.90	100.70	0.00
	Total Mass (10lb)	10.00			

Chalk Cove Stabilization Field Gradation Test 2

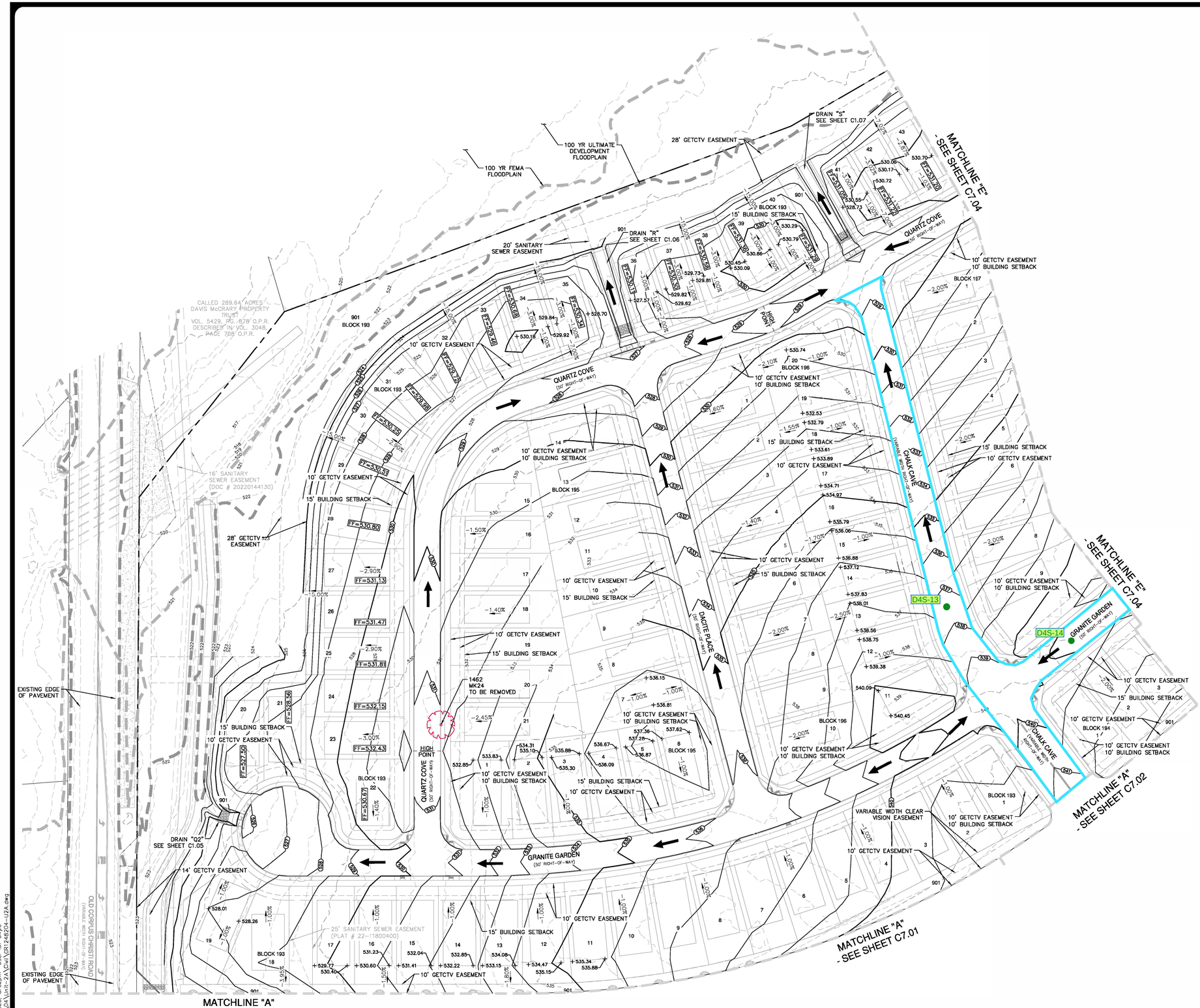
Sieve no.	Sieve Opening (mm)	Mass of Soil retained (lb.)	Percent of mass retained (%)	Cumulative percent retained (%)	Percent finer passing (%)
1-3/4"	45.000	0.00	0.00	0.00	100.00
3/4"	19.000	0.44	1.80	1.80	98.20
#4	4.750	3.09	30.20	32.00	69.80
pan	0.00	6.43	68.00	100.00	0.00
	Total Mass (10lb)	10.00			

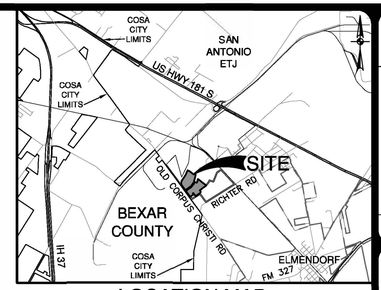
N/A Stabilization Field Gradation Test 3

Sieve no.	Sieve Opening (mm)	Mass of Soil retained (lb.)	Percent of mass retained (%)	Cumulative percent retained (%)	Percent finer passing (%)
1-3/4"	45.000	0.00	0.00	0.00	100.00
3/4"	19.000	0.00	0.00	0.00	100.00
#4	4.750	0.00	0.00	0.00	100.00
pan	0.00	0.00	0.00	0.00	100.00
	Total Mass (10lb)	10.00			

Gradation Requirements (Minimum % Passing)

Sieve Size	Subgrade
1-3/4"	100.00
3/4"	85.00
#4	60.00





LOCATION MAP

NOT-TO-SCALE

SCALE: 1"= 50'

0' 50' 100' 150'

GRADING LEGEND

PROJECT LIMITS	
100 YR FLOODPLAIN	
EXISTING CONTOUR	976
PROPOSED CONTOUR	970
FLOW ARROW (EXISTING)	
FLOW ARROW (PROPOSED)	
MINIMUM FINISHED FLOOR ELEVATION	FF = XXXX.XX
TREES TO REMAIN	
TREES TO BE REMOVED	
VEHICULAR NON ACCESS EASEMENT	VNAE

GRADING NOTES:

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19. NO WORK SHALL BE PERFORMED IN A PUBLIC RIGHT–OF–WAY WITHOUT A PERMIT.

NO.	REVISION	DATE

STATE OF TEXAS
EUGENE H. DAWSON III
112792
LICENSED
PROFESSIONAL ENGINEER
11/14/23

PAPE-DAWSON ENGINEERS
SAN ANTONIO | AUSTIN | HOUSTON | FORT WORTH | DALLAS
2000 NW LOOP 410 | SAN ANTONIO, TX 78213 | 210.375.9000
TEXAS ENGINEERING FIRM #470 | TEXAS SURVEYING FIRM #10028800

STONE GARDEN - UNIT 2A

BEXAR COUNTY, TEXAS

OVERALL GRADING PLAN

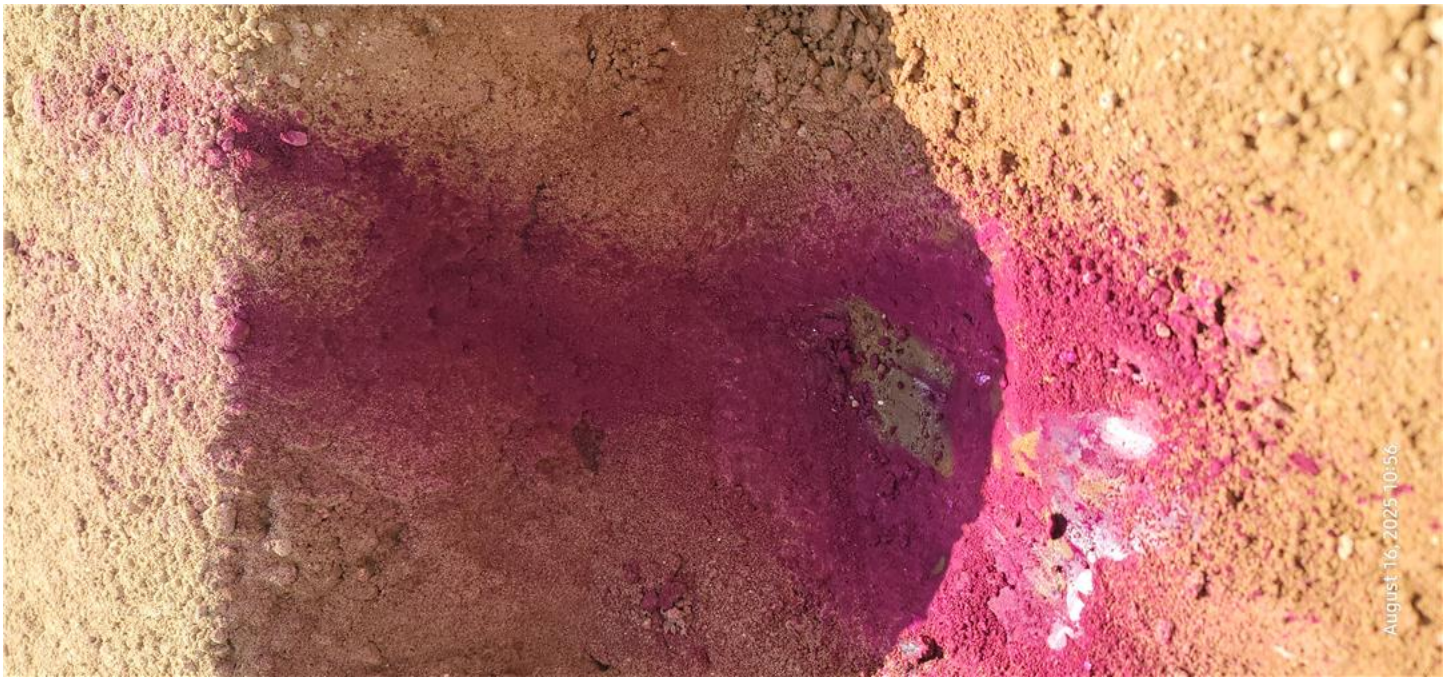
PLAT NO.	22-11800734
JOB NO.	12482-04
DATE	AUGUST 2023
DESIGNER	JG
CHECKED	DW DRAWN TC
SHEET	C7.03

Date: Nov 16, 2023, 5:32pm User ID: bkyle
File: P:\124\82\04\Unit-2A\Civil\GR\248204-U2A.dwg

Attachments

Chalk Cave STA 3+50 Collection Site

Figure 1



Chalk Cave STA 3+50 Phenolphthalein Test Closeup

Figure 2

Attachments

Chalk Cave STA 3+50 Phenolphthalein Test Zoomed out

Figure 3

Granite Garden STA 11+00 Collection Site

Figure 4

Attachments

Granite Garden STA 11+00 Phenolphthalein Test

Figure 5

TX Registered Firm # F-8461

ECS Southwest, LLP
431 Isom Road, Suite 114
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LETTER OF TRANSMITTAL

August 18, 2025
Lennar
100 NE Loop 410 Suite 1155
San Antonio, TX 78216

ATTN: Mr. Nathan Nowell

RE: **Stone Garden - Unit 2A**
ECS Job # **20:1910**

Permits:
Location: **14395 Old Corpus Christi Road**
Elmendorf, TX 78112

X	Field Reports	**X**	For your use	**X**	As requested

CC: Lennar - Rogelio "Roy" Olivarez, Jr.

ENCL:

Field Report # 83	8/15/2025	Lime gradation and Lime procto

Adam James Heiman, P.E.
Assistant Office Manager

Stephanie Marie Chavez
CMT Project Professional I

Disclaimer

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3. Where appropriate, this report includes statements as to compliance with applicable project drawings, and specifications for the activities, performed on this report date.
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5. The results of samples and/or specimens obtained or prepared for subsequent laboratory testing will be presented in separate reports/documents.

TX Registered Engineering Firm # F-8461

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FIELD REPORT

Project	**Stone Garden - Unit 2A**
Location	**Elmendorf, TX**
Client	**Lennar**
Contractor	**Lennar**

Project No.	**20:1910**
Report No.	**83**
Day & Date	**Friday 8/15/2025**
Weather	**100 °/ Sunny**
On-Site Time	**3.00**
Lab Time	**1.00**
Travel Time*	**1.00**
Total	**5.00**
Re Obs Time	**0.00**

Remarks **Lime gradation and Lime procto**

Trip Charges*	Tolls/Parking*	Mileage*	Time of	Arrival	Departure
35.00					
Chargeable Items				**11:00A**	**2:00P**

* Travel time and mileage will be billed in accordance with the contract.

Summary of Services Performed (field test data, locations, elevations & depths are estimates) & Individuals Contacted.

The undersigned arrived on-site, as requested to perform gradations for the lime treated subgrade for Gabro Cove and Granite Garden. Please see the attached sketch.

The applicable plans and geotechnical report were reviewed prior to testing. TxDOT Item 260 was performed for lime treated subgrade gradations. Sieve gradations appeared to meet the specifications.

SOIL SAMPLE PICK UP:
While on site, as requested, the undersigned obtained 2 samples of lime treated subgrade material for testing in our laboratory. The sample was obtained from the processed lime treated subgrade.

Locations:
Gabro Cove near station 3+00
Granite Garden near station 7+00

The two (2) samples were obtained and approximately 2 buckets of each of the material was obtained and returned to the laboratory for testing.

Additionally, the undersigned obtained one (1) sample of A2 base material for testing in our laboratory. The sample was obtained from the on-site intersection of Mudstone Place and Hornblende Trails and will be used for base material for roadways.

Prior to departure, Vince Arriaga with V.K. Knowlton was informed of the results of the day's observations.

By Jonny Jones 1700

Gabbro Cove Stabilization Field Gradation Test 1

Sieve no.	Sieve Opening (mm)	Mass of Soil retained (lb.)	Percent of mass retained (%)	Cumulative percent retained (%)	Percent finer passing (%)
1-3/4"	45.000	0.00	0.00	0.00	100.00
3/4"	19.000	0.22	2.20	2.20	97.80
#4	4.750	3.02	30.20	32.40	69.80
pan	0.00	6.69	66.90	99.30	0.70
	Total Mass (10lb)	10.00			

Granite Garden Stabilization Field Gradation Test 2

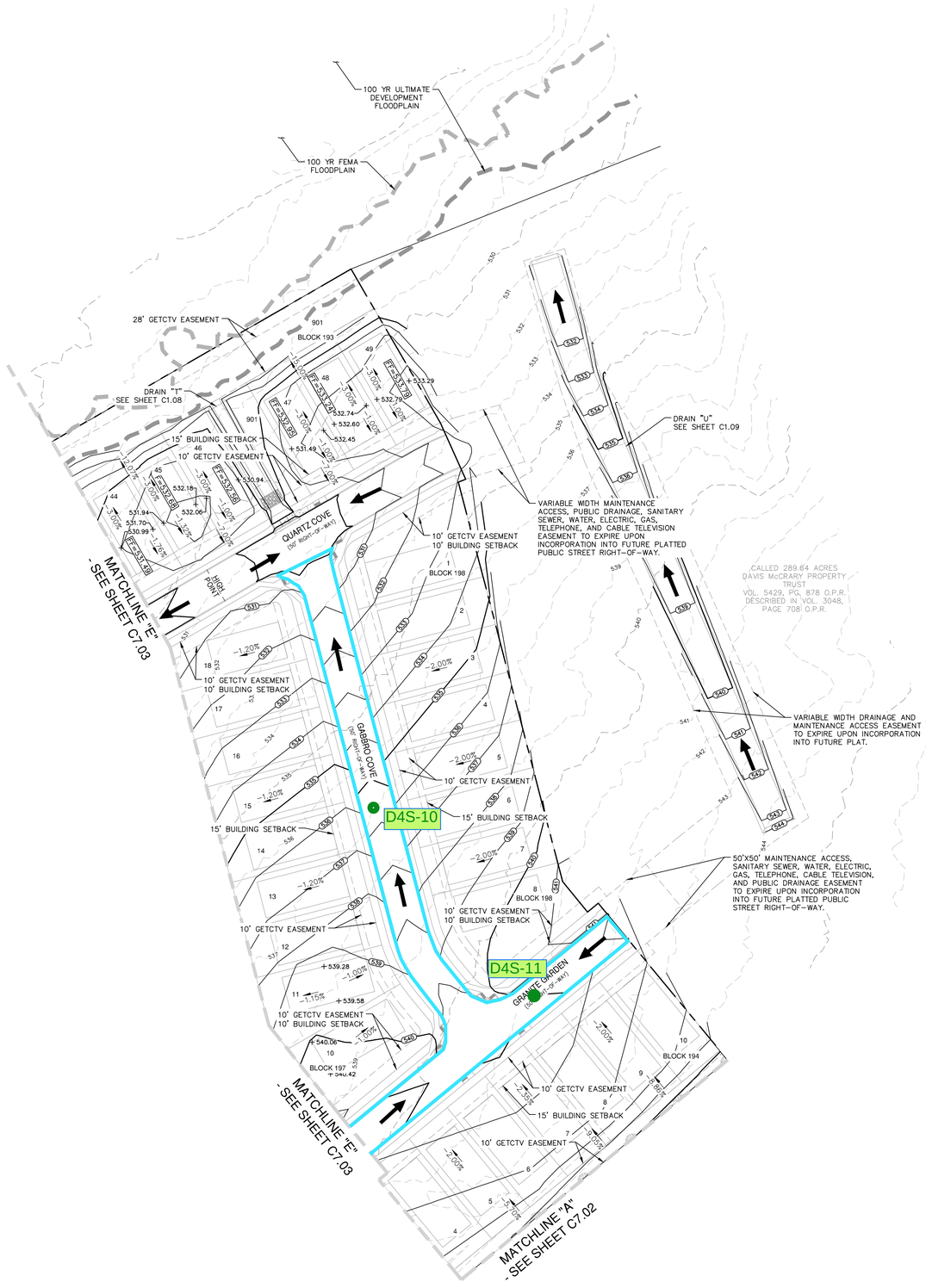
Sieve no.	Sieve Opening (mm)	Mass of Soil retained (lb.)	Percent of mass retained (%)	Cumulative percent retained (%)	Percent finer passing (%)
1-3/4"	45.000	0.00	0.00	0.00	100.00
3/4"	19.000	0.01	1.80	1.80	98.20
#4	4.750	2.88	30.20	32.00	69.80
pan	0.00	7.10	68.00	100.00	0.00
	Total Mass (10lb)	10.00			

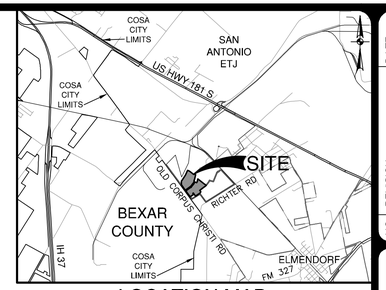
Stabilization Field Gradation Test 3

Sieve no.	Sieve Opening (mm)	Mass of Soil retained (lb.)	Percent of mass retained (%)	Cumulative percent retained (%)	Percent finer passing (%)
1-3/4"	45.000	0.00	0.00	0.00	100.00
3/4"	19.000	0.00	0.00	0.00	100.00
#4	4.750	0.00	0.00	0.00	100.00
pan	0.00	0.00	0.00	0.00	100.00
	Total Mass (10lb)	10.00			

Gradation Requirements (Minimum % Passing)

Sieve Size	Subgrade
1-3/4"	100.00
3/4"	85.00
#4	60.00





LOCATION MAP

NOT-TO-SCALE

SCALE: 1"= 50'

0' 50' 100' 150'

GRADING LEGEND

PROJECT LIMITS	
100 YR FLOODPLAIN	
EXISTING CONTOUR	976
PROPOSED CONTOUR	970
FLOW ARROW (EXISTING)	
FLOW ARROW (PROPOSED)	
MINIMUM FINISHED FLOOR ELEVATION	FF = XXXX.XX
TREES TO REMAIN	
TREES TO BE REMOVED	
VEHICULAR NON ACCESS EASEMENT	VNAE

GRADING NOTES:

1. ALL MATERIALS AND CONSTRUCTION PROCEDURES WITHIN THIS SCOPE OF WORK WHERE NOT SPECIFICALLY COVERED IN THE SPECIFICATIONS OR GEOTECHNICAL REPORT SHALL CONFORM TO ALL APPLICABLE CITY, COUNTY AND TXDOT STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION (LATEST EDITION).

2. SITE PREPARATION, GRADING, EXCAVATION AND FILL SHALL BE PERFORMED IN ACCORDANCE WITH THE PROJECT GEOTECHNICAL REPORT AND SPECIFICATIONS.

3. ALL SELECT FILL MATERIAL PROVIDED SHALL BE APPROVED BY THE GEOTECHNICAL ENGINEER PRIOR TO PLACING AND COMPACTING.

4. ALL ELEVATIONS AND PROPOSED CONTOURS SHOWN ON THIS GRADING PLAN REFLECT FINISHED GRADES. THE THICKNESS OF PAVING, BASE, GRASS, TOPSOIL, AND MULCH MUST BE SUBTRACTED TO OBTAIN SUBGRADE ELEVATIONS.

5. THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE ENGINEER OF ANY QUESTIONS THAT MAY ARISE CONCERNING THE INTENT, PLACEMENT, OR LIMITS OF DIMENSIONS OR GRADES NECESSARY FOR CONSTRUCTION OF THIS PROJECT.

6. THE CONTRACTOR SHALL VERIFY THE SUITABILITY OF ALL EXISTING AND PROPOSED SITE CONDITIONS INCLUDING GRADES AND DIMENSIONS BEFORE COMMENCEMENT OF CONSTRUCTION. THE ENGINEER SHALL BE NOTIFIED IMMEDIATELY OF ANY DISCREPANCIES.

7. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ACQUIRING ALL PERMITS, TESTS, APPROVALS AND ACCEPTANCES REQUIRED TO COMPLETE CONSTRUCTION OF THIS PROJECT.

8. THE CONTRACTOR SHALL REMOVE TOP SOIL, GRASS, ROOTS, DEBRIS, ETC. AND DISPOSE OFF SITE THOSE MATERIALS NOT SUITABLE FOR EMBANKMENT AND TOPSOIL. CLEAN STRIPPINGS AND TOPSOIL MAY BE STOCKPILED ON SITE FOR REUSE IN A LOCATION SPECIFIED BY THE OWNER.

9. THE SITE CONTRACTOR SHALL BE RESPONSIBLE FOR SITE STABILIZATION. ALL DISTURBED AREAS SHALL BE REVEGETATED IN ACCORDANCE WITH PROJECT SPECIFICATIONS AND TPDES/SWPPP REQUIREMENTS. REFERENCE THE LANDSCAPE ARCHITECT'S PLAN, IF APPLICABLE.

10. THE CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS (USE OF SILT FENCES, ETC.) TO KEEP DRAINAGE AND SILT FROM WASHING ONTO ADJACENT PROPERTY, STREETS, OR DRAINAGE WAYS. CONTRACTOR SHALL IMMEDIATELY REMOVE SILT/DEBRIS WHICH WASHES OFFSITE OR INTO EXISTING STORM DRAIN SYSTEMS. (SEE SWPPP PLANS & TPDES BOOK).

11. THE CONTRACTOR SHALL OBTAIN GRADES SHOWN HEREON WITHIN +/- ONE-TENTH (0.10) FOOT.

12. IN PROPOSED PAVING AREAS, STREET DESIGN PLANS SHALL CONTROL. ALL EARTHEN SLOPES SHALL BE A MAXIMUM OF 3:1 AND A MINIMUM OF 1.0% UNLESS OTHERWISE SHOWN.

13. THE CONTRACTOR SHALL PROVIDE A SMOOTH TRANSITION BETWEEN EXISTING SITE AND PROPOSED IMPROVEMENTS.

14. THE CONTRACTOR SHALL BE RESPONSIBLE FOR RESTORING TO ITS ORIGINAL, OR BETTER, CONDITION ANY DAMAGE DONE TO EXISTING TREES, BUILDINGS, UTILITIES, FENCES, PAVEMENT, CURBS, OR DRIVEWAYS (NO SEPARATE PAY ITEMS).

15. THE CONTRACTOR SHALL EXERCISE EXTREME CAUTION IN WORKING NEAR UTILITIES, GAS LINES, SEWER, OR EXISTING APPURTENANCES. PRIOR TO PERFORMING ANY EXCAVATION, CONTRACTOR SHALL CONTACT ALL UTILITY COMPANIES AND ASSURE HIMSELF THAT ALL UTILITIES HAVE BEEN ADEQUATELY LOCATED AND IDENTIFIED. THE ENGINEER SHALL BE NOTIFIED IF ANY UTILITY CONFLICTS ARE DISCOVERED.

16. UTILITIES SHOWN ON THE PLANS ARE FROM INFORMATION SOURCES AVAILABLE AT THE TIME OF DESIGN BUT MAY NOT REPRESENT ALL EXISTING UTILITIES ON SITE. THE CONTRACTOR WILL BE RESPONSIBLE FOR DETERMINING EXACT LOCATION OF ALL UTILITIES WHETHER SHOWN ON THE PLANS OR NOT. THE CONTRACTOR SHALL UNCOVER EXISTING UTILITIES PRIOR TO CONSTRUCTION AND VERIFY SIZE, GRADE AND LOCATION. THE CONTRACTOR SHALL NOTIFY THE ENGINEER IMMEDIATELY OF ANY DEVIATIONS FROM PLANS PRIOR TO BEGINNING CONSTRUCTION. ANY DAMAGE TO EXISTING UTILITIES, WHETHER SHOWN ON THE PLANS OR NOT, SHALL BE THE CONTRACTORS RESPONSIBILITY TO REPAIR, AT HIS OWN EXPENSE.

17. POSITIVE DRAINAGE SHALL BE MAINTAINED THROUGHOUT THE SCOPE OF THE PROJECT. DRAINAGE SHALL BE DIRECTED AWAY FROM ALL BUILDING FOUNDATIONS. CONTRACTOR SHOULD TAKE PRECAUTIONS NOT TO ALLOW ANY PONDING OF WATER.

18. FOR FILL PLACEMENT ON HILL SIDES OR STEEP SLOPE AREAS, THE CONTRACTOR SHALL REFERENCE THE PROJECT SPECIFICATIONS AND GEOTECHNICAL REPORT FOR SPECIAL INSTRUCTIONS REGARDING BENCHING.

19. NO WORK SHALL BE PERFORMED IN A PUBLIC RIGHT-OF-WAY WITHOUT A PERMIT.

NO.	REVISION	DATE

STATE OF TEXAS
EUGENE H. DAWSON III
112792
LICENSED PROFESSIONAL ENGINEER
11/14/23

PAPE-DAWSON ENGINEERS
SAN ANTONIO | AUSTIN | HOUSTON | FORT WORTH | DALLAS
2000 NW LOOP 410 | SAN ANTONIO, TX 78213 | 210.375.9000
TEXAS ENGINEERING FIRM #470 | TEXAS SURVEYING FIRM #10028800

STONE GARDEN - UNIT 2A
BEXAR COUNTY, TEXAS

OVERALL GRADING PLAN

PLAT NO. 22-11800734
JOB NO. 12482-04
DATE AUGUST 2023
DESIGNER JG
CHECKED DW DRAWN TC
SHEET C7.04

Date: Nov 16, 2023, 5:33pm User ID: bkyle
File: P:\124\82\04\Unit-2A\Civil\GR\248204-U2A.dwg

Attachments

lime gradations and proctor pick up

Figure 1

lime gradations and proctor pick up

Figure 2

Attachments

lime gradations and proctor pick up

Figure 3

lime gradations

Figure 4

Attachments

lime gradations

Figure 5

lime gradations

Figure 6

Attachments

lime gradations

Figure 7

lime gradations

Figure 8

TX Registered Firm # F-8461

ECS Southwest, LLP
431 Isom Road, Suite 114
San Antonio, TX 78216
T 210.528.1430
F 214.483.9684

LETTER OF TRANSMITTAL

August 22, 2025
Lennar
100 NE Loop 410 Suite 1155
San Antonio, TX 78216

ATTN: Mr. Nathan Nowell

RE: **Stone Garden - Unit 2A**
ECS Job # **20:1910**

Permits:
Location: **14395 Old Corpus Christi Road**
Elmendorf, TX 78112

X Field Reports **X** For your use **X** As requested

CC: City of San Antonio - Development Services Department - Juan Ramirez
Lennar - Rogelio "Roy" Olivarez, Jr.
V.K. Knowlton Construction - Sammy Ramos

ENCL:

Laboratory testing services have been completed for the following sample obtained by ECS on 08/14/2025(reference report 20:1952-81).

On-site Lime-Stabilized Material:

ID: D4S-7:for Dacit Place STA 2+50- Atterberg Limits (SP), Sieve Analysis, and Standard Proctor

ID: D4S-8:for Quartz Cove STA 12+00- Atterberg Limits (SP), Sieve Analysis, and Standard Proctor

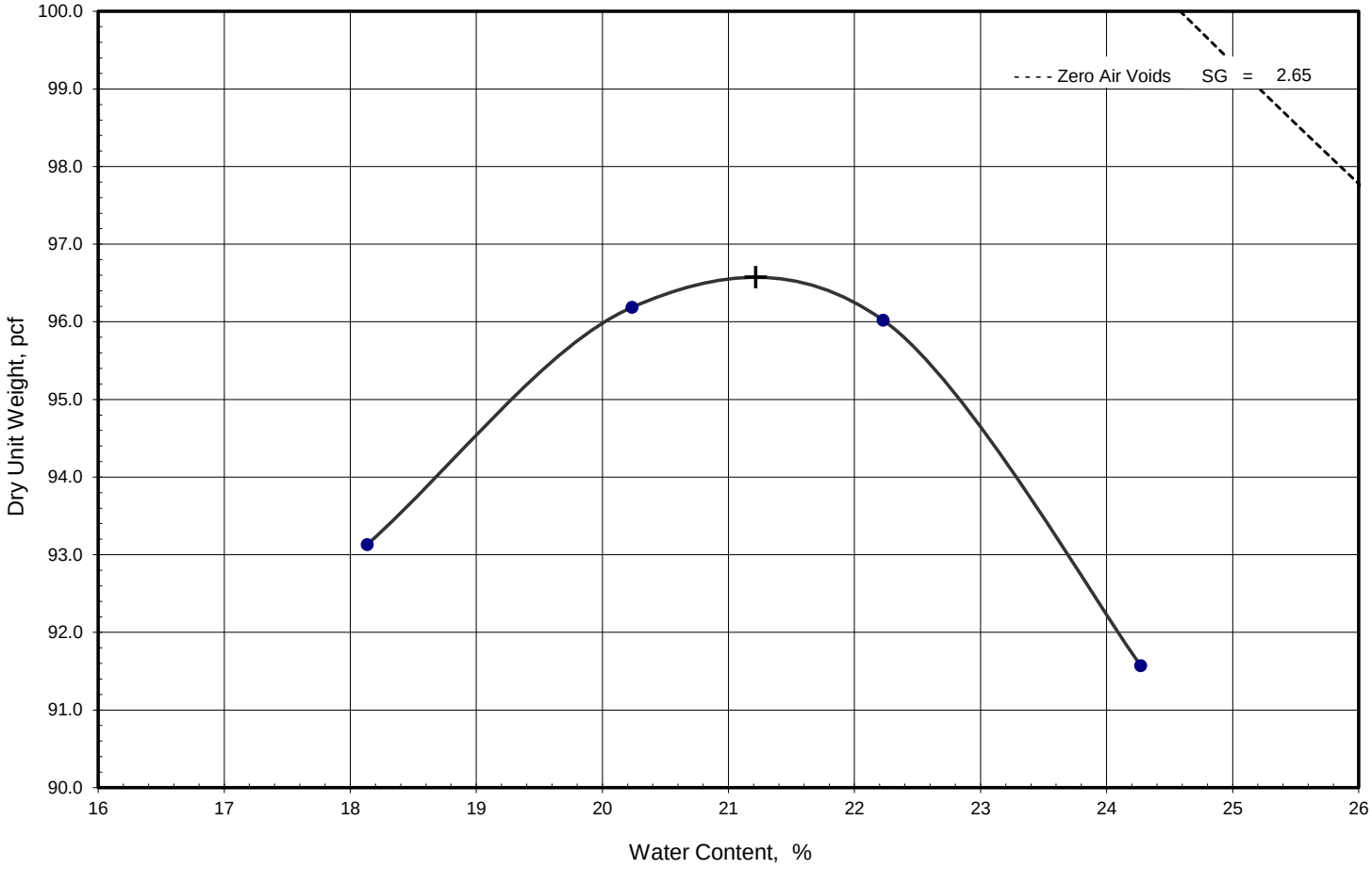
ID: D4S-9:for Quartz Cove STA 5+00- Atterberg Limits (SP), Sieve Analysis, and Standard Proctor

Results:
Material meets criteria for Lime-Stabilized for: type, gradation and plasticity.

Adam James Heiman, P.E.
Assistant Office Manager

Stephanie Marie Chavez
CMT Project Professional I

Laboratory Compaction Characteristics of Soil
Using Standard Effort



Optimum Moisture Content	**21.2**	%	Preparation	ASTM moist preparation
Maximum Dry Unit Weight	**96.6**	pcf	Type of rammer	Mechanical - circular face
			Test Specfication / Method	ASTM D698-12e2-method A

Soil Description	Nat. Moist. %	Liquid Limit	Plasticity Index	%< #200	USCS	AASHTO
(SM) SILTY SAND, Reddish Brown	12.4	NP	NP	10.4		A-2-4

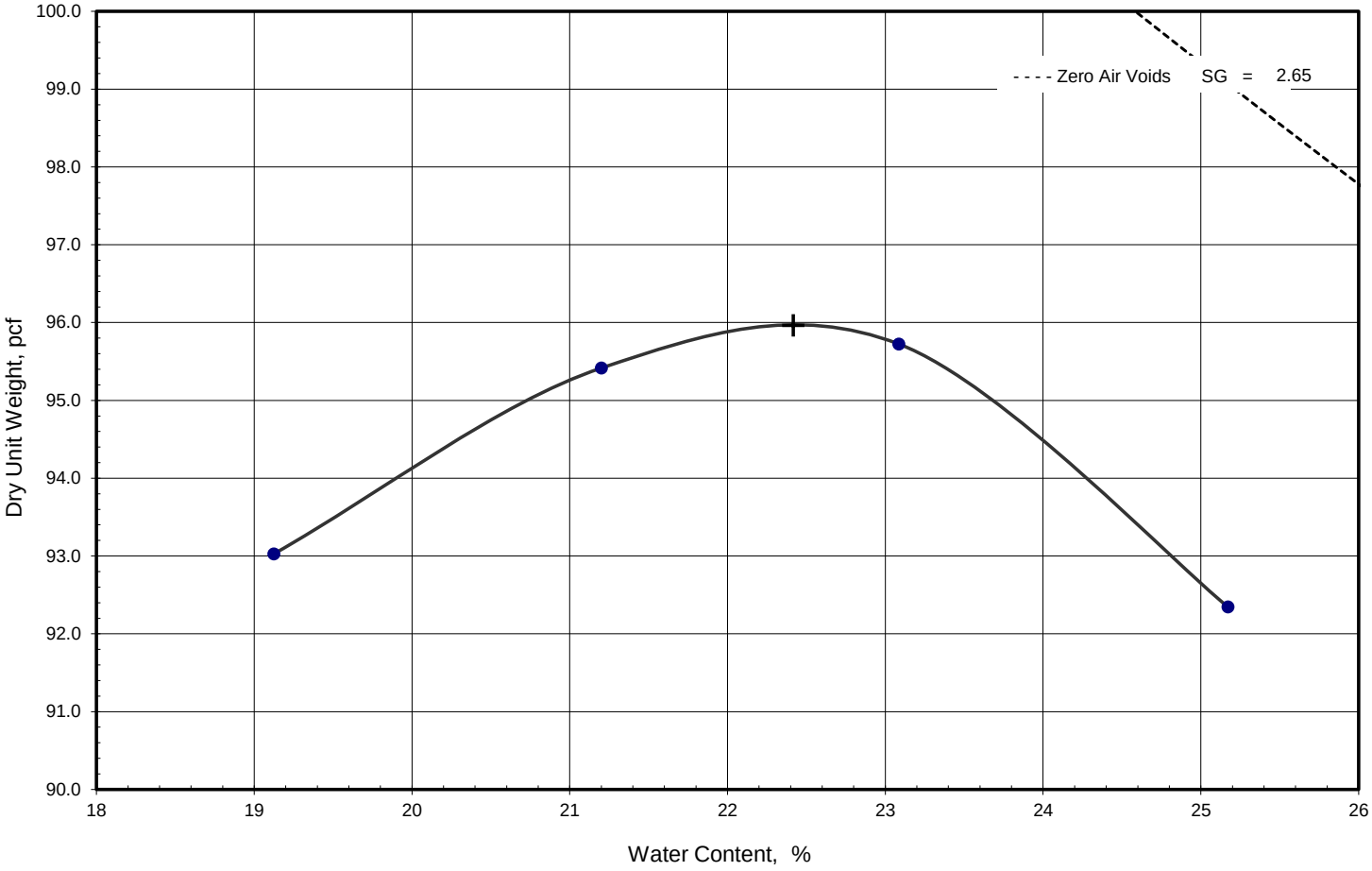
Project: Stone Garden - Unit 2A
Client: Lennar
Sample / Source: On-site Lime stabilized material at Dacit Pl STA 2+50

Project No.: 20:1910
Depth (ft.): 0 - 1
Sample No.: D4S-7
Date Reported: 8/21/2025

Office / Lab	Address	Office Number / Fax
ECS Southwest LLP - San Antonio	431 Isom Road Suite 114 San Antonio, TX 78216	(210)528-1430 (214)483-9684

Tested by	Checked by	Approved by	Date Received	Remarks
fzuniga	fzuniga	fzuniga		

Laboratory Compaction Characteristics of Soil Using Standard Effort



Optimum Moisture Content	**22.4**	%	Preparation	ASTM moist preparation
Maximum Dry Unit Weight	**96.0**	pcf	Type of rammer	Mechanical - circular face
			Test Specfication / Method	ASTM D698-12e2-method A

Soil Description	Nat. Moist. %	Liquid Limit	Plasticity Index	%< #200	USCS	AASHTO
(SM) SILTY SAND, Reddish Brown	13.9	NP	NP	12.9		A-2-4

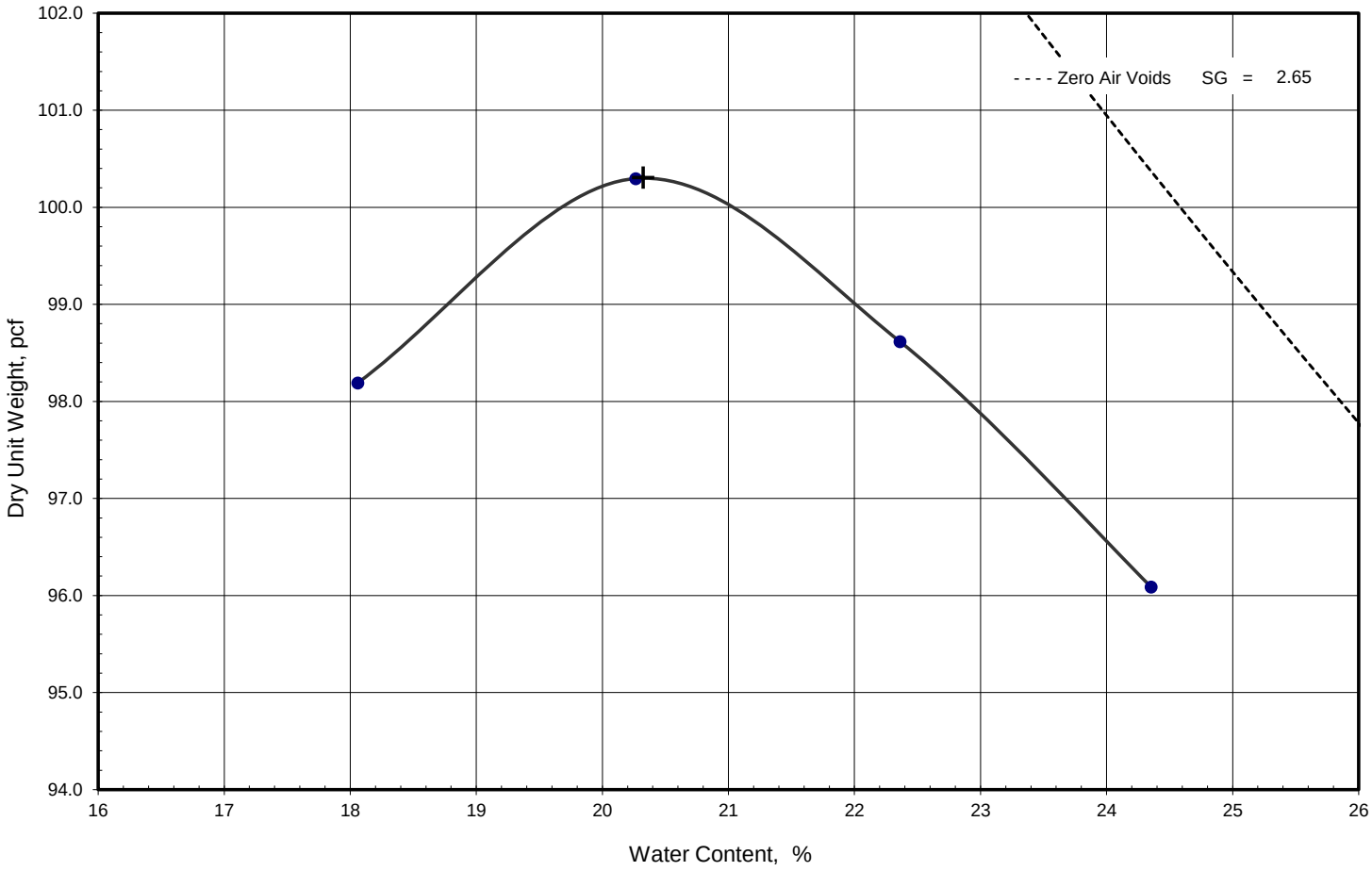
Project: Stone Garden - Unit 2A
Client: Lennar
Sample / Source: On-site Lime stabilized material at Quartz Cove STA 12+00

Project No.: 20:1910
Depth (ft.): 0 - 1
Sample No.: D4S-8
Date Reported: 8/21/2025

Office / Lab	Address	Office Number / Fax
ECS Southwest LLP - San Antonio	431 Isom Road Suite 114 San Antonio, TX 78216	(210)528-1430 (214)483-9684

Tested by	Checked by	Approved by	Date Received	Remarks
fzuniga	fzuniga	fzuniga		

Laboratory Compaction Characteristics of Soil Using Standard Effort



Optimum Moisture Content	**20.3**	%
Maximum Dry Unit Weight	**100.3**	pcf

Preparation	ASTM moist preparation
Type of rammer	Mechanical - circular face
Test Specfication / Method	ASTM D698-12e2-method A

Soil Description	Nat. Moist. %	Liquid Limit	Plasticity Index	%< #200	USCS	AASHTO
(SM) SILTY SAND, Reddish Brown	13.1	NP	NP	25.0		A-2-4

Project: Stone Garden - Unit 2A
Client: Lennar
Sample / Source: On-site Lime stabilized material at Quartz Cove STA 5+00

Project No.: 20:1910
Depth (ft.): 0 - 1
Sample No.: D4S-9
Date Reported: 8/21/2025

Office / Lab	Address	Office Number / Fax
ECS Southwest LLP - San Antonio	431 Isom Road Suite 114 San Antonio, TX 78216	(210)528-1430 (214)483-9684

Tested by	Checked by	Approved by	Date Received	Remarks
fzuniga	fzuniga	fzuniga		

TX Registered Firm # F-8461

ECS Southwest, LLP
431 Isom Road, Suite 114
San Antonio, TX 78216
T 210.528.1430
F 214.483.9684

LETTER OF TRANSMITTAL

August 25, 2025
Lennar
100 NE Loop 410 Suite 1155
San Antonio, TX 78216

ATTN: Mr. Nathan Nowell

RE: **Stone Garden - Unit 2A**
ECS Job # **20:1910**

Permits:
Location: **14395 Old Corpus Christi Road**
Elmendorf, TX 78112

X Field Reports **X** For your use **X** As requested

CC: City of San Antonio - Development Services Department - Juan Ramirez
Lennar - Rogelio "Roy" Olivarez, Jr.
V.K. Knowlton Construction - Sammy Ramos

ENCL: Field Report # 84 8/25/2025 Lime gradation and Lime procto

Adam James Heiman, P.E.
Assistant Office Manager

Stephanie Marie Chavez
CMT Project Professional I

TX Registered Engineering Firm # F-8461

ECS Southwest, LLP
431 Isom Road, Suite 114
San Antonio, TX 78216
T 210.528.1430
F 214.483.9684

FIELD REPORT

Project No.	**20:1910**
Report No.	**84**
Day & Date	**Monday 8/25/2025**
Weather	**90 °/ Partly Cloudy**
On-Site Time	**4.50**
Lab Time	**0.75**
Travel Time*	**1.00**
Total	**6.25**
Re Obs Time	**0.00**

Project	**Stone Garden - Unit 2A**
Location	**Elmendorf, TX**
Client	**Lennar**
Contractor	**Lennar**

Remarks **Lime gradation and Lime procto**

Trip Charges*	**35.00**	Tolls/Parking*	Mileage*	Time of	Arrival	Departure
Chargeable Items	**5000**				**10:00A**	**2:30P**

* Travel time and mileage will be billed in accordance with the contract.

Summary of Services Performed (field test data, locations, elevations & depths are estimates) & Individuals Contacted.

The undersigned arrived on-site, as requested to perform gradations for the lime treated subgrade for Quartz Cove and Dacite Place. Please see the attached sketch.

The applicable plans and geotechnical report were reviewed prior to testing. TxDOT Item 260 was performed for lime treated subgrade gradations. Sieve gradations appeared to meet the specifications.

While on site, as requested, the undersigned obtained 3 samples of lime treated subgrade material for testing in our laboratory. The sample was obtained from the processed lime treated subgrade.

Locations:
Place near station 2+50
Azzurro Stone near stations 5+00 and 11+00

The three (3) samples were obtained and approximately 2 buckets of each of the material was obtained and returned to the laboratory for testing.

Prior to departure, Vence Arriaga with V.K. Knowlton was informed of the results of the day's observations.

By Nathan Allen 1800

Field Compaction Summary, D6938

Project No: 20:1910 Project Name: Stone Garden - Unit 2A Date: 8/25/2025

ECS Southwest, LLP

Client: Lennar

Contractor: Lennar

Technician: Nathan Allen

Test Method D6938			
Nuclear Gauge No. 78650			
Make	Troxler	Density Std	2265
Model	3430P	Moisture Std	665
Ser. No.	78650		

Sample No.	Description	Proctor Method	Uncorrected Max. Density	Uncorrected Optimum Moisture Content
D4S-9	**(SM) SILTY SAND, Reddish Brown**	**ASTM D698-12e2-method A**	**100.3**	**20.3**
D4S-7	**(SM) SILTY SAND, Reddish Brown**	**ASTM D698-12e2-method A**	**96.6**	**21.2**

Test No.	Lot No.	Test Mode	Probe Depth (in.)	Station / Location	Lift / Elev	Sample No.	% Oversize	Corrected Max. Density	Corrected Optimum Moisture Content (%)	Wet Density (pcf)	Dry Density (pcf)	Moisture Content (%)	Percent Comp. (%)	P / F	Comments
1		DT	6	T1 Quartz Cove STA 14+00	Subgrade	D4S-9	0.00	100.3	20.3	117.0	98.0	19.4	97.7	P	
2		DT	6	T2 Quartz Cove STA 12+50	Subgrade	D4S-9	0.00	100.3	20.3	122.0	102.4	19.1	102.1	P	
3		DT	6	T3 Quartz Cove STA 11+00	Subgrade	D4S-9	0.00	100.3	20.3	119.8	101.0	18.6	100.7	P	
4		DT	6	T4 Quartz Cove STA 9+50	Subgrade	D4S-9	0.00	100.3	20.3	121.6	101.3	20.0	101.0	P	
5		DT	6	T5 Quartz Cove STA 8+00	Subgrade	D4S-9	0.00	100.3	20.3	119.4	99.7	19.8	99.4	P	
6		DT	6	T6 Quartz Cove STA 6+50	Subgrade	D4S-9	0.00	100.3	20.3	118.5	97.7	21.3	97.4	P	
7		DT	6	T7 Quartz Cove STA 5+00	Subgrade	D4S-9	0.00	100.3	20.3	120.5	100.8	19.5	100.5	P	
8		DT	6	T8 Quartz Cove STA 3+50	Subgrade	D4S-9	0.00	100.3	20.3	120.0	101.0	18.8	100.7	P	
9		DT	6	T9 Quartz Cove STA 2+00	Subgrade	D4S-9	0.00	100.3	20.3	117.1	95.9	22.1	95.6	P	
10		DT	6	T10 Dacite Place STA 2+00	Subgrade	D4S-7	0.00	96.6	21.2	118.7	97.4	21.9	100.8	P	

Test Mode: DT = Direct Transmission BS = Back Scatter

WO: 45754

Field Compaction Summary, D6938

Project No: 20:1910 Project Name: Stone Garden - Unit 2A Date: 8/25/2025

ECS Southwest, LLP

Client: Lennar

Contractor: Lennar

Technician: Nathan Allen

Test Method D6938			
Nuclear Gauge No. 78650			
Make	Troxler	Density Std	2265
Model	3430P	Moisture Std	665
Ser. No.	78650		

Test No.	Lot No.	Test Mode	Probe Depth (in.)	Station / Location	Lift / Elev	Sample No.	% Oversize	Corrected Max. Density	Corrected Optimum Moisture Content (%)	Wet Density (pcf)	Dry Density (pcf)	Moisture Content (%)	Percent Comp. (%)	P / F	Comments
11		DT	6	T11 Dacite Place STA 3+50	Subgrade	D4S-7	0.00	96.6	21.2	114.0	92.7	23.0	96.0	P	
12		DT	6	T12 Dacite Place STA 5+00	Subgrade	D4S-7	0.00	96.6	21.2	117.7	98.7	19.2	102.2	P	

Test Mode: DT = Direct Transmission BS = Back Scatter

WO: 45754

REPORT OF LIME TREATED SUBGRADE FIELD GRADATIONS

Project: **Stone Garden** **Date: 8/25/25**

Project No.: **1910**

Sample Location: **Azzurro Stone and Basalts Garden**

Sample Description: **Lime treated subgrade**

Azzurro Stone Station 11+00 Stabilization Field Gradation Test 1

Sieve no.	Sieve Opening (mm)	Percent of mass retained (%)	Percent finer passing (%)
1-3/4"	45.000	0.00	100.00
3/4"	19.000	2.90	97.10
#4	4.750	29.60	70.40
Pan	0.00	67.50	0.00

Azzurro Stone Station 5+00 Stabilization Field Gradation Test 2

Sieve no.	Sieve Opening (mm)	Percent of mass retained (%)	Percent finer passing (%)
1-3/4"	45.000	0.00	100.00
3/4"	19.000	5.60	94.40
#4	4.750	27.60	72.40
Pan	0.00	66.80	0.00

Basalts Garden Station 1+00 Stabilization Field Gradation Test 3

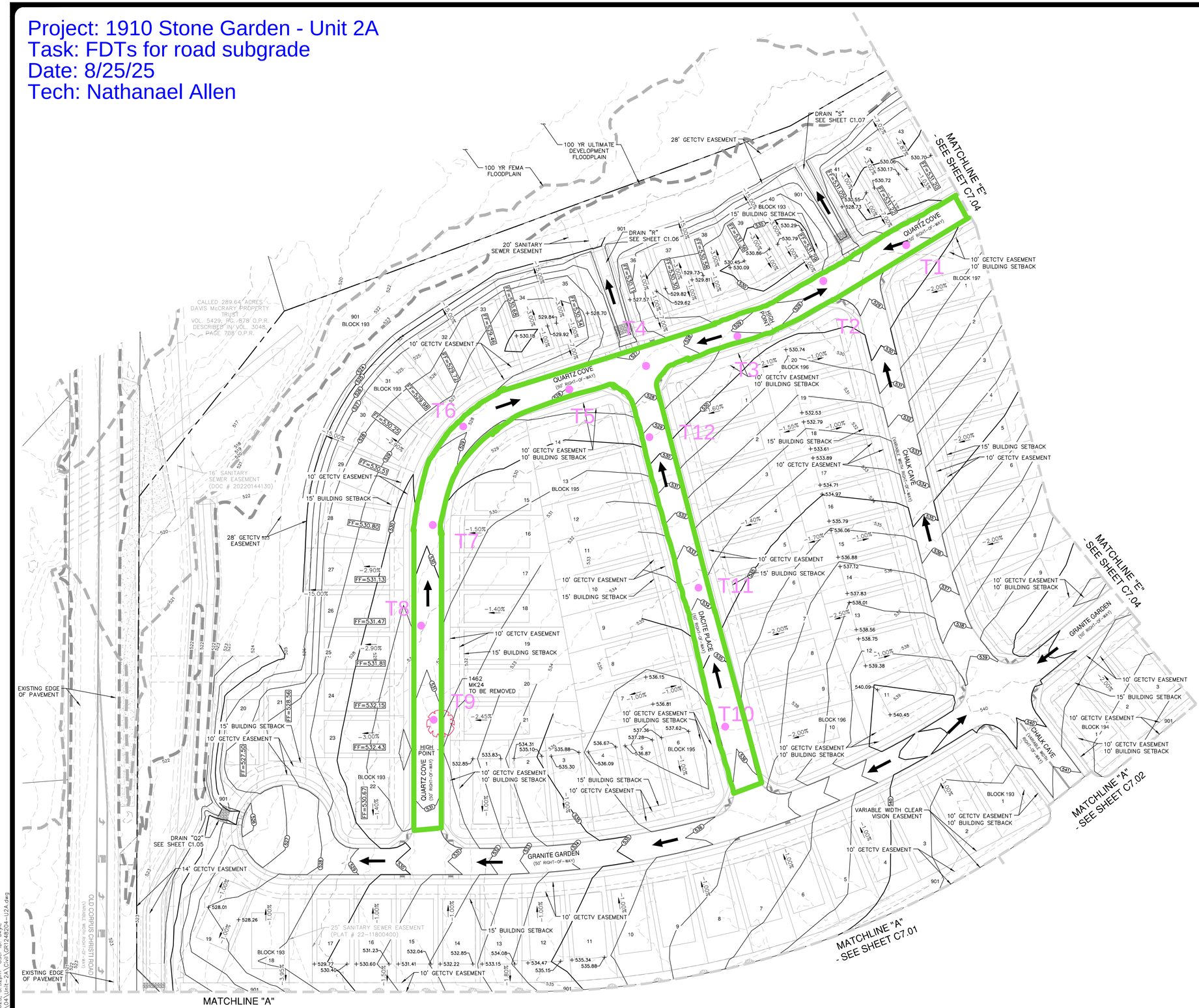
Sieve no.	Sieve Opening (mm)	Percent of mass retained (%)	Percent finer passing (%)
1-3/4"	45.000	0.00	100.00
3/4"	19.000	5.00	95.00
#4	4.750	29.70	70.30
Pan	0.00	65.30	0.00

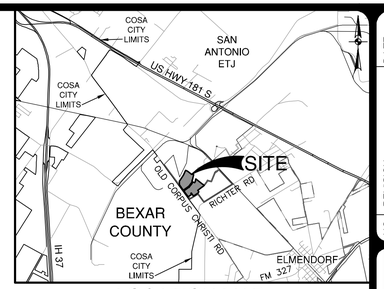
Gradation Requirements (Minimum % Passing)

Sieve Size	
1-3/4"	100
3/4"	85
#4	60

REMARKS: * Field gradations meet the projects minimum requirements.

Project: 1910 Stone Garden - Unit 2A
Task: FDTs for road subgrade
Date: 8/25/25
Tech: Nathanael Allen





LOCATION MAP
NOT-TO-SCALE

SCALE: 1"= 50'
0' 50' 100' 150'

GRADING LEGEND

PROJECT LIMITS	
100 YR FLOODPLAIN	
EXISTING CONTOUR	976
PROPOSED CONTOUR	970
FLOW ARROW (EXISTING)	
FLOW ARROW (PROPOSED)	
MINIMUM FINISHED FLOOR ELEVATION	FF = XXXX.XX
TREES TO REMAIN	
TREES TO BE REMOVED	
VEHICULAR NON ACCESS EASEMENT	VNAE

GRADING NOTES:

1. ALL MATERIALS AND CONSTRUCTION PROCEDURES WITHIN THIS SCOPE OF WORK WHERE NOT SPECIFICALLY COVERED IN THE SPECIFICATIONS OR GEOTECHNICAL REPORT SHALL CONFORM TO ALL APPLICABLE CITY, COUNTY AND TXDOT STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION (LATEST EDITION).

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NO.	REVISION	DATE

STATE OF TEXAS
EUGENE H. DAWSON III
112792
LICENSED
PROFESSIONAL ENGINEER
11/14/23

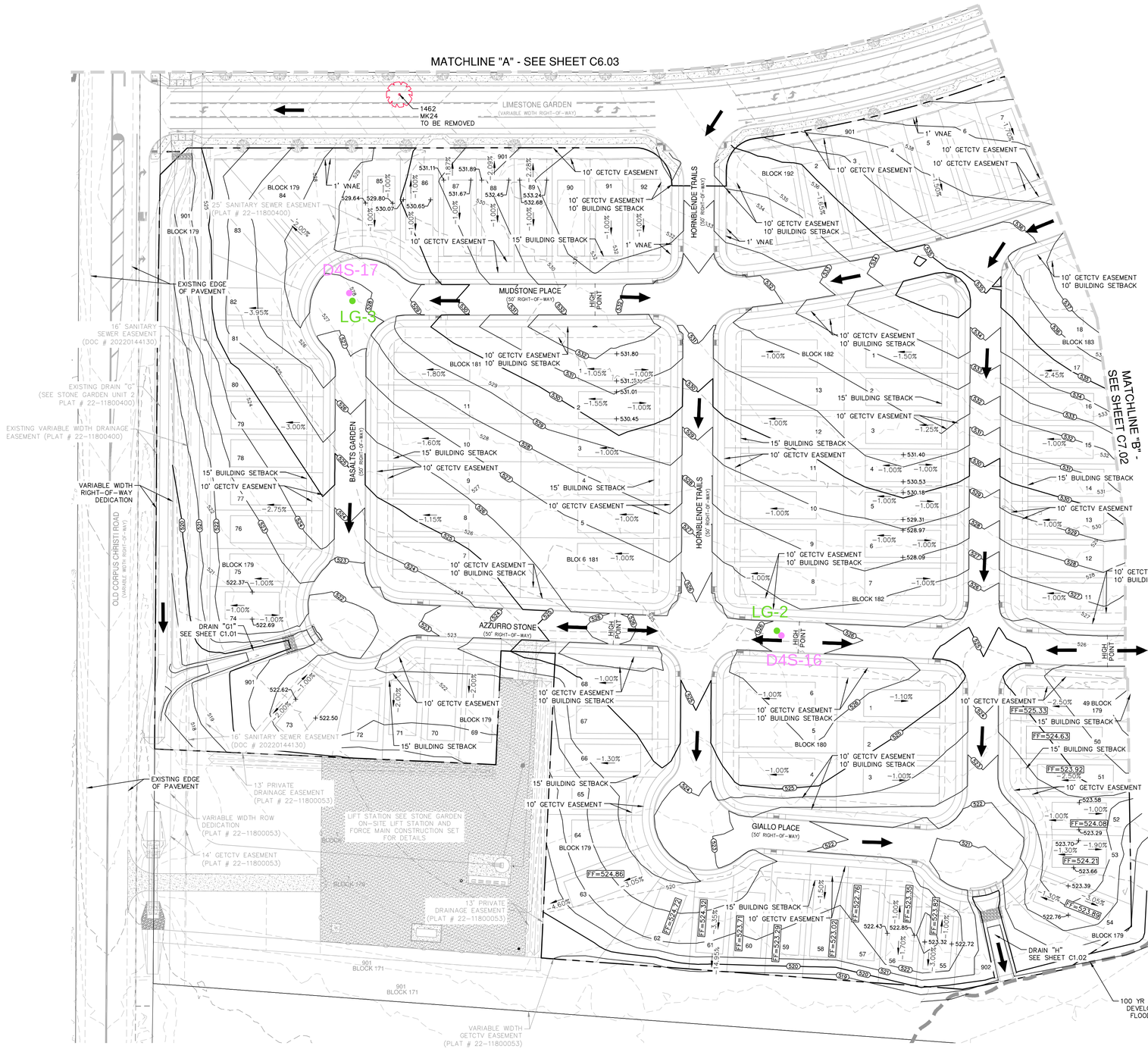
PAPE-DAWSON ENGINEERS
SAN ANTONIO | AUSTIN | HOUSTON | FORT WORTH | DALLAS
2000 NW LOOP 410 | SAN ANTONIO, TX 78213 | 210.375.9000
TEXAS ENGINEERING FIRM #470 | TEXAS SURVEYING FIRM #10028800

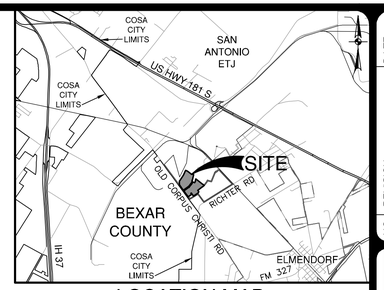
STONE GARDEN - UNIT 2A
BEXAR COUNTY, TEXAS
OVERALL GRADING PLAN

PLAT NO. 22-11800734
JOB NO. 12482-04
DATE AUGUST 2023
DESIGNER JG
CHECKED DW DRAWN TC
SHEET C7.03

Date: Nov 16, 2023, 5:32pm User ID: bkyle
File: P:\124\82\04\Unit-2A\Civil\GR\248204-U2A.dwg

Project: 1910 Stone Garden
Task: Like gradations and proctor samples for Azzurro Stone and Basalts Garden
Date: 8/25/25
Tech: Nathanael Allen





LOCATION MAP
NOT-TO-SCALE

SCALE: 1"= 50'
0' 50' 100' 150'

GRADING LEGEND

PROJECT LIMITS	
100 YR FLOODPLAIN	
EXISTING CONTOUR	976
PROPOSED CONTOUR	970
FLOW ARROW (EXISTING)	
FLOW ARROW (PROPOSED)	
MINIMUM FINISHED FLOOR ELEVATION	FF = XXXX.XX
TREES TO REMAIN	
TREES TO BE REMOVED	
VEHICULAR NON ACCESS EASEMENT	VNAE

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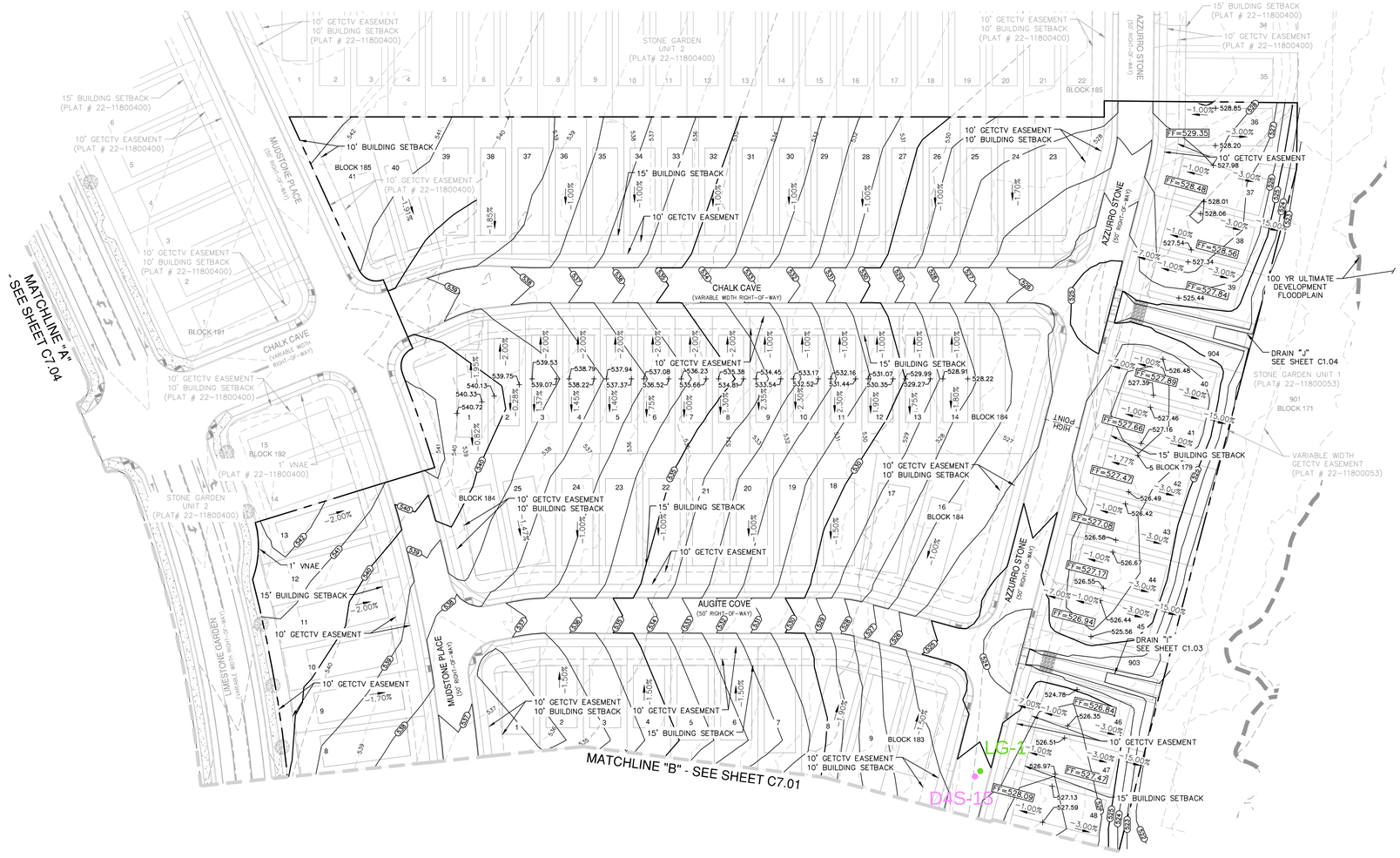
STONE GARDEN - UNIT 2A
BEXAR COUNTY, TEXAS

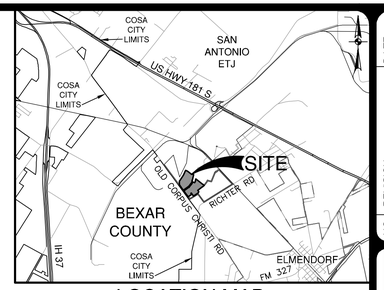
OVERALL GRADING PLAN

PLAT NO. 22-11800734
JOB NO. 12482-04
DATE AUGUST 2023
DESIGNER JG
CHECKED DW DRAWN TC
SHEET C7.01

Date: Nov 16, 2023, 5:32pm User ID: bkyle
File: P:\124\82\04\Unit-2A\Civil\GR\124804-U2A.dwg

Project: 1910 Stone Garden
Task: Like gradations and proctor samples for Azzurro Stone
Date: 8/25/25
Tech: Nathanael Allen





LOCATION MAP
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SCALE: 1"= 50'
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STONE GARDEN - UNIT 2A
BEXAR COUNTY, TEXAS

OVERALL GRADING PLAN

PLAT NO. 22-11800734
JOB NO. 12482-04
DATE AUGUST 2023
DESIGNER JG
CHECKED DW DRAWN TC
SHEET C7.02

Date: Nov 16, 2023, 5:32pm User ID: bkyle
File: P:\12A\82\04\Unit-2A\Civil\GR\12482004-U2A.dwg

Attachments

Quartz cove lime treated subgrade near station 11+00

Figure 1

Dacite Place like treated subgrade near station 2+00

Figure 2

Attachments

Quartz cove station marker by contractor

Figure 3

Lime mixer near Azzurro Stone

Figure 4

Attachments

Lime treated subgrade proctor collection at Azzurro Stone near station 5+00

Figure 5

Lime treated subgrade at Bassalts Garden near station 1+00

Figure 6

Attachments

Azzurro Stone like treated subgrade near station 11+00

Figure 7

TX Registered Firm # F-8461

ECS Southwest, LLP
431 Isom Road, Suite 114
San Antonio, TX 78216
T 210.528.1430
F 214.483.9684

LETTER OF TRANSMITTAL

August 26, 2025
Lennar
100 NE Loop 410 Suite 1155
San Antonio, TX 78216

ATTN: Mr. Nathan Nowell

RE: **Stone Garden - Unit 2A**
ECS Job # **20:1910**

Permits:
Location: **14395 Old Corpus Christi Road**
Elmendorf, TX 78112

X Field Reports **X** For your use **X** As requested

CC: City of San Antonio - Development Services Department - Juan Ramirez
Lennar - Rogelio "Roy" Olivarez, Jr.
V.K. Knowlton Construction - Sammy Ramos

ENCL:

Laboratory testing services have been completed for the following sample obtained by ECS on 08/15/2025 and 8/16/2025 (reference report 20:1952-82 and 20:1952-83).

On-site Lime-Stabilized Material:

ID: D4S-10:for Gabro Cove STA 3+00- Atterberg Limits (SP), Sieve Analysis, and Standard Proctor

ID: D4S-11:for Granite Garden STA 7+00- Atterberg Limits (SP), Sieve Analysis, and Standard Proctor

ID: D4S-13:for Granite Garden STA 11+00- Atterberg Limits (SP), Sieve Analysis, and Standard Proctor

ID: D4S-14:for Chalk Cave STA 3+50- Atterberg Limits (SP), Sieve Analysis, and Standard Proctor

Imported A2 Base Material:

ID: D4S-12: Atterberg Limits (SP), Sieve Analysis, and TEX-113E

Results:
Material meets criteria for Lime-Stabilized and A2 Base for: type, gradation and plasticity.

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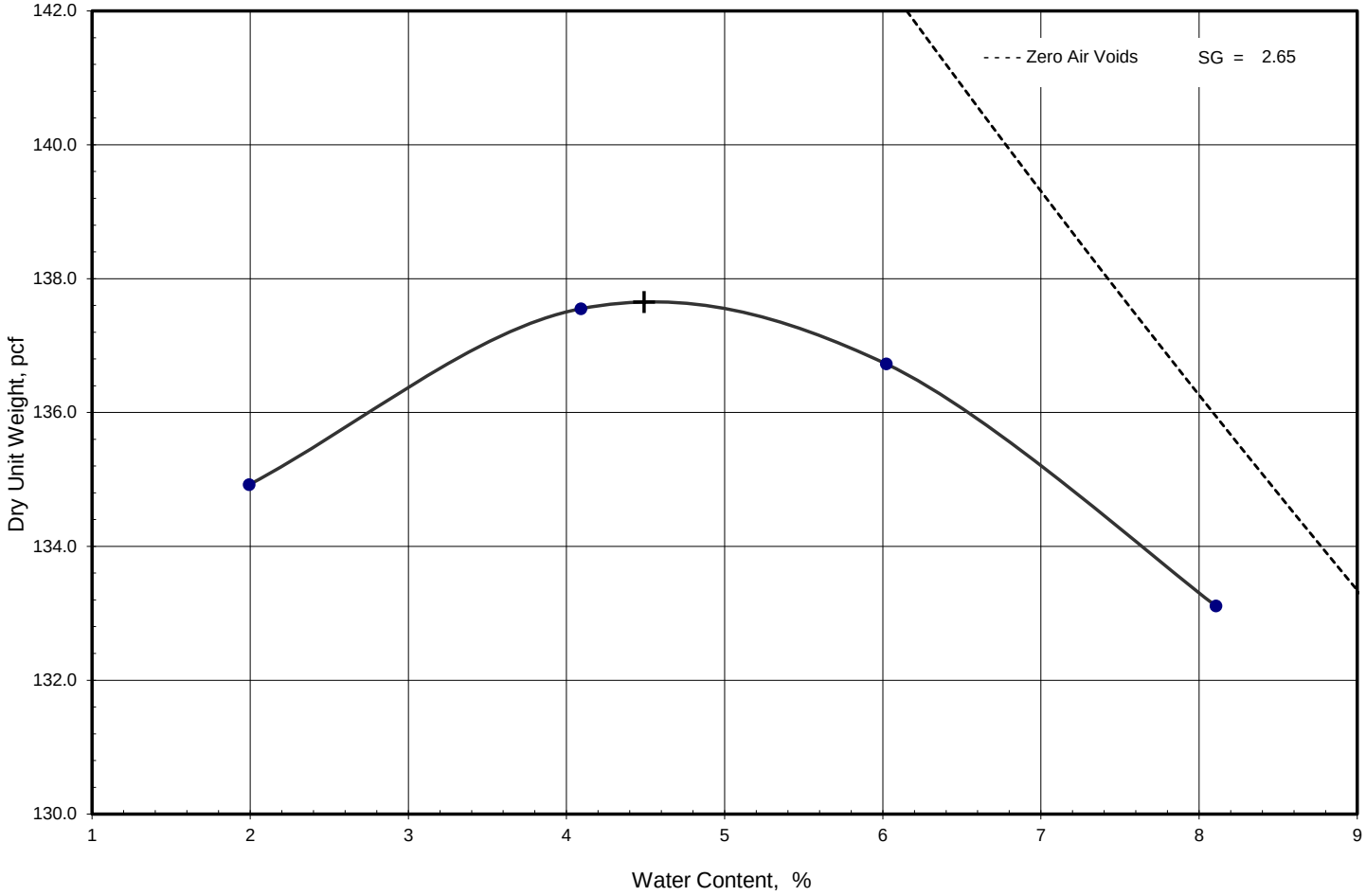
Adam James Heiman, P.E.
Assistant Office Manager

Stephanie Marie Chavez
CMT Project Professional I

Disclaimer

1. This report (and any attachments) shall not be reproduced except in full without prior written approval of ECS.
2. The information in this report relates only to the activities performed on the report date.
3. Where appropriate, this report includes statements as to compliance with applicable project drawings, and specifications for the activities, performed on this report date.
4. Incomplete or non-conforming work will be reported for future resolution.
5. The results of samples and/or specimens obtained or prepared for subsequent laboratory testing will be presented in separate reports/documents.

Laboratory Compaction Characteristics of Soil
TEX-113-E



Optimum Moisture Content	**4.5**	%	Preparation	TEX-101-E
Maximum Dry Unit Weight	**137.7**	pcf	Type of rammer	Mechanical - sector face
			Test Specfication / Method	TEX-113-E

Soil Description	Nat. Moist. %	Liquid Limit	Plasticity Index	%< #200	USCS	AASHTO
(GP-GC) POORLY GRADED GRAVEL WITH SILTY CLAY & SAND, Light Tan	3.3	17	4	11.8	GP-GC	A-1-a

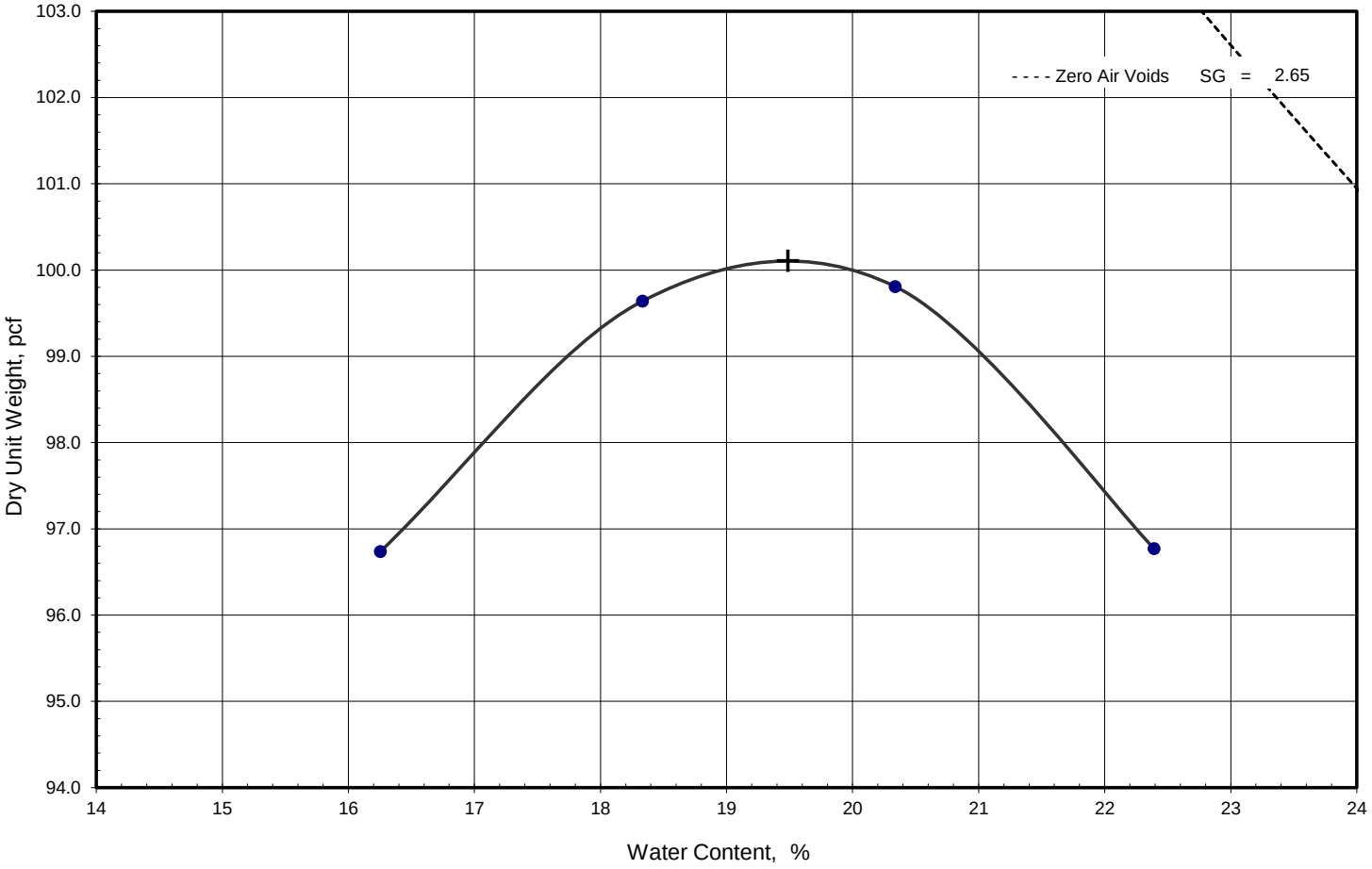
Project: Stone Garden - Unit 2A
Client: Lennar
Sample / Source: Import A2 Base Material

Project No.: 20:1910
Depth (ft.): 0 - 1
Sample No.: D4S-12
Date Reported: 8/26/2025

Office / Lab	Address	Office Number / Fax
ECS Southwest LLP - San Antonio	431 Isom Road Suite 114 San Antonio, TX 78216	(210)528-1430 (214)483-9684

Tested by	Checked by	Approved by	Date Received	Remarks
fzuniga	fzuniga	fzuniga		

Laboratory Compaction Characteristics of Soil
Using Standard Effort



Optimum Moisture Content	**19.5**	%
Maximum Dry Unit Weight	**100.1**	pcf

Preparation	ASTM moist preparation
Type of rammer	Mechanical - circular face
Test Specfication / Method	ASTM D698-12e2-method A

Soil Description	Nat. Moist. %	Liquid Limit	Plasticity Index	%< #200	USCS	AASHTO
(SM) SILTY SAND, Reddish Brown	14.3		NP	7.8		A-2-4

Project: Stone Garden - Unit 2A
Client: Lennar
Sample / Source: On-site Lime stabilized material at Gabro Cove STA 3+00

Project No.: 20:1910
Depth (ft.): 0 - 1
Sample No.: D4S-10
Date Reported: 8/26/2025

Office / Lab	Address	Office Number / Fax
ECS Southwest LLP - San Antonio	431 Isom Road Suite 114 San Antonio, TX 78216	(210)528-1430 (214)483-9684

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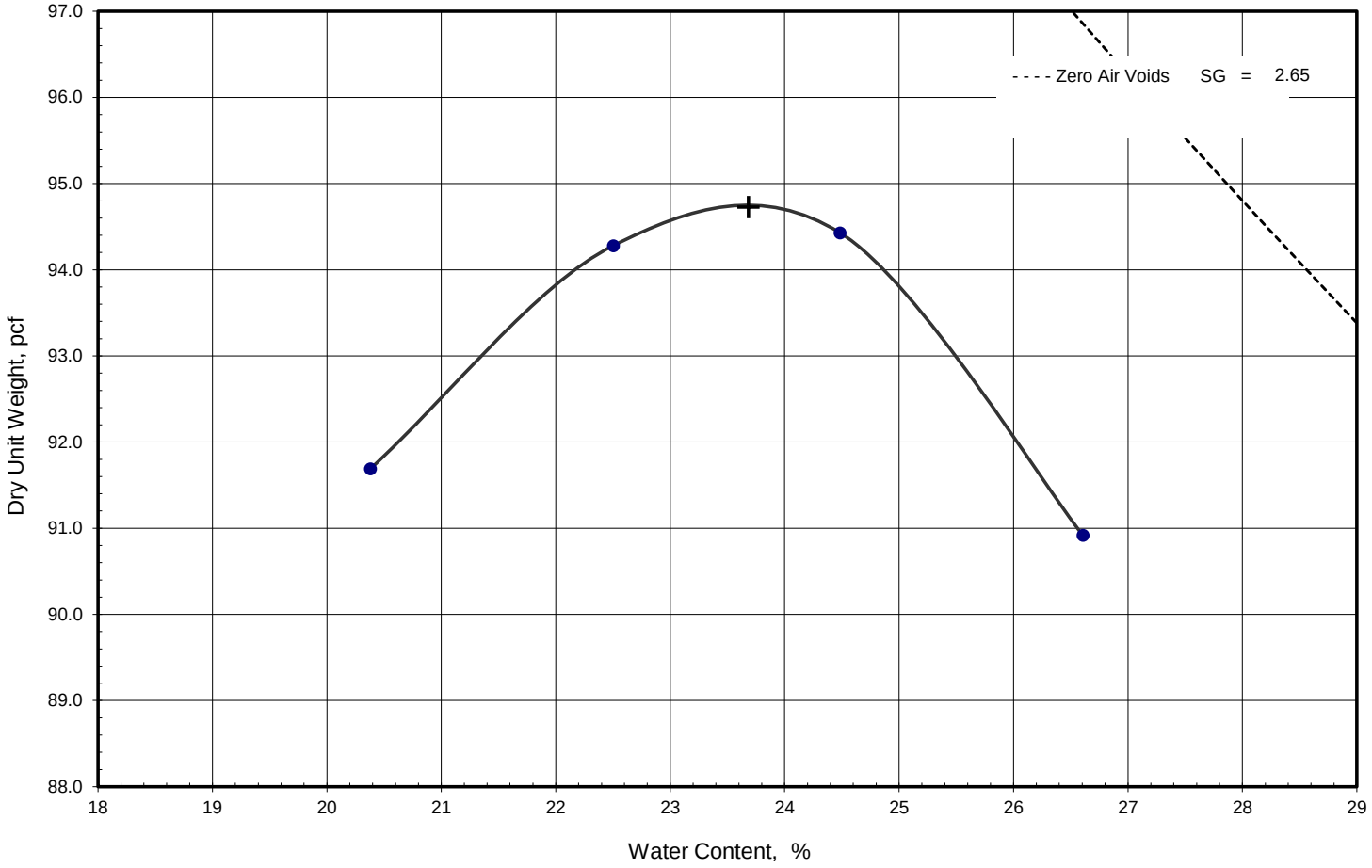
Laboratory Compaction Characteristics of Soil
Using Standard Effort



Optimum Moisture Content	**23.7**	%
Maximum Dry Unit Weight	**94.7**	pcf

Preparation	ASTM moist preparation
Type of rammer	Mechanical - circular face
Test Specfication / Method	ASTM D698-12e2-method A

Soil Description	Nat. Moist. %	Liquid Limit	Plasticity Index	%< #200	USCS	AASHTO
(SM) SILTY SAND, Reddish Brown	18.6		NP	13.0		A-2-4

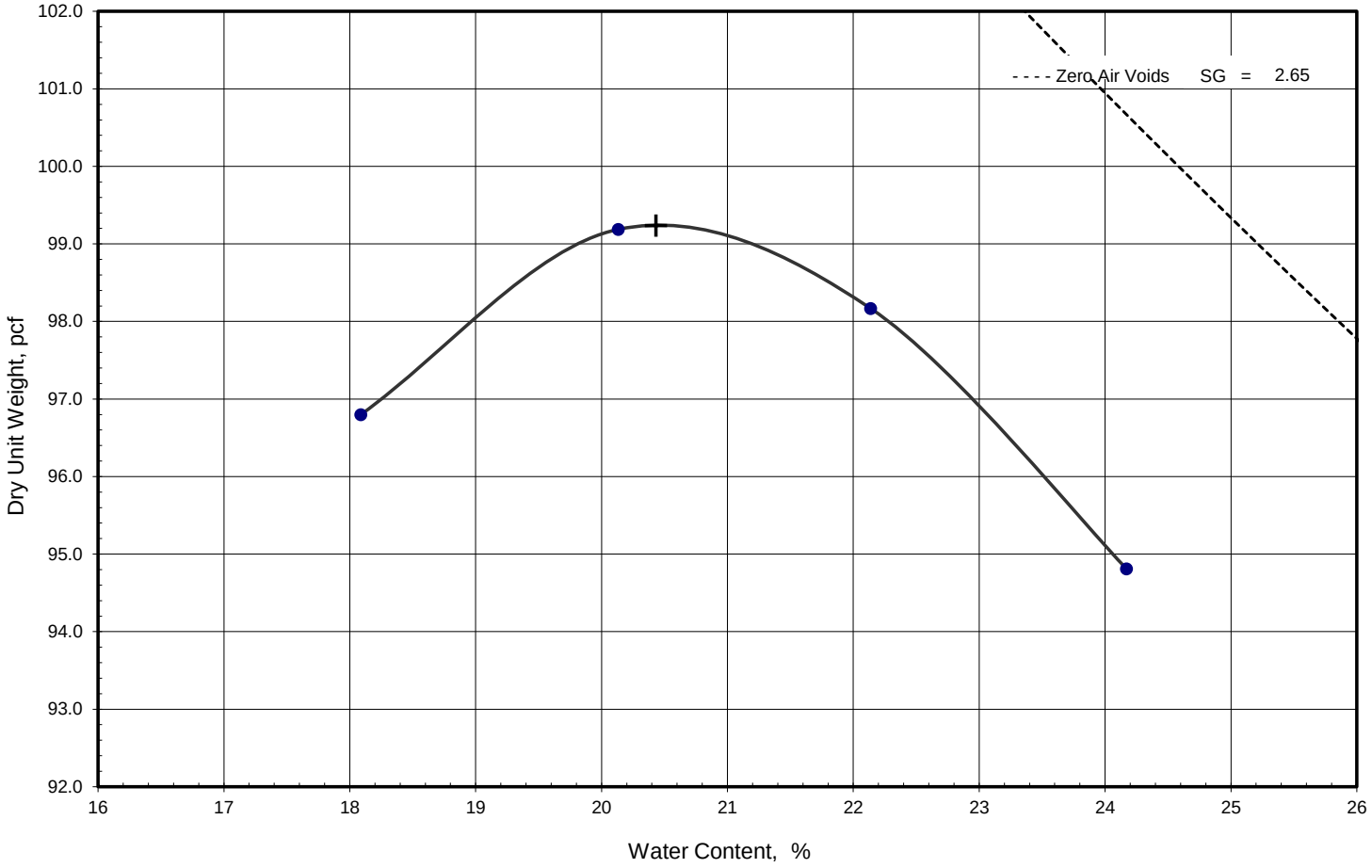
Project: Stone Garden - Unit 2A
Client: Lennar
Sample / Source: On-site Lime stabilized material at Granite Garden STA 7+00

Project No.: 20:1910
Depth (ft.): 0 - 1
Sample No.: D4S-11
Date Reported: 8/26/2025

Office / Lab	Address	Office Number / Fax
ECS Southwest LLP - San Antonio	431 Isom Road Suite 114 San Antonio, TX 78216	(210)528-1430 (214)483-9684

Tested by	Checked by	Approved by	Date Received	Remarks
fzuniga	fzuniga	fzuniga		

Laboratory Compaction Characteristics of Soil
Using Standard Effort



Optimum Moisture Content	**20.4**	%	Preparation	ASTM moist preparation
Maximum Dry Unit Weight	**99.2**	pcf	Type of rammer	Mechanical - circular face
			Test Specfication / Method	ASTM D698-12e2-method A

Soil Description	Nat. Moist. %	Liquid Limit	Plasticity Index	%< #200	USCS	AASHTO
(SM) SILTY SAND, Reddish Brown	12.8		NP	13.5		A-2-4

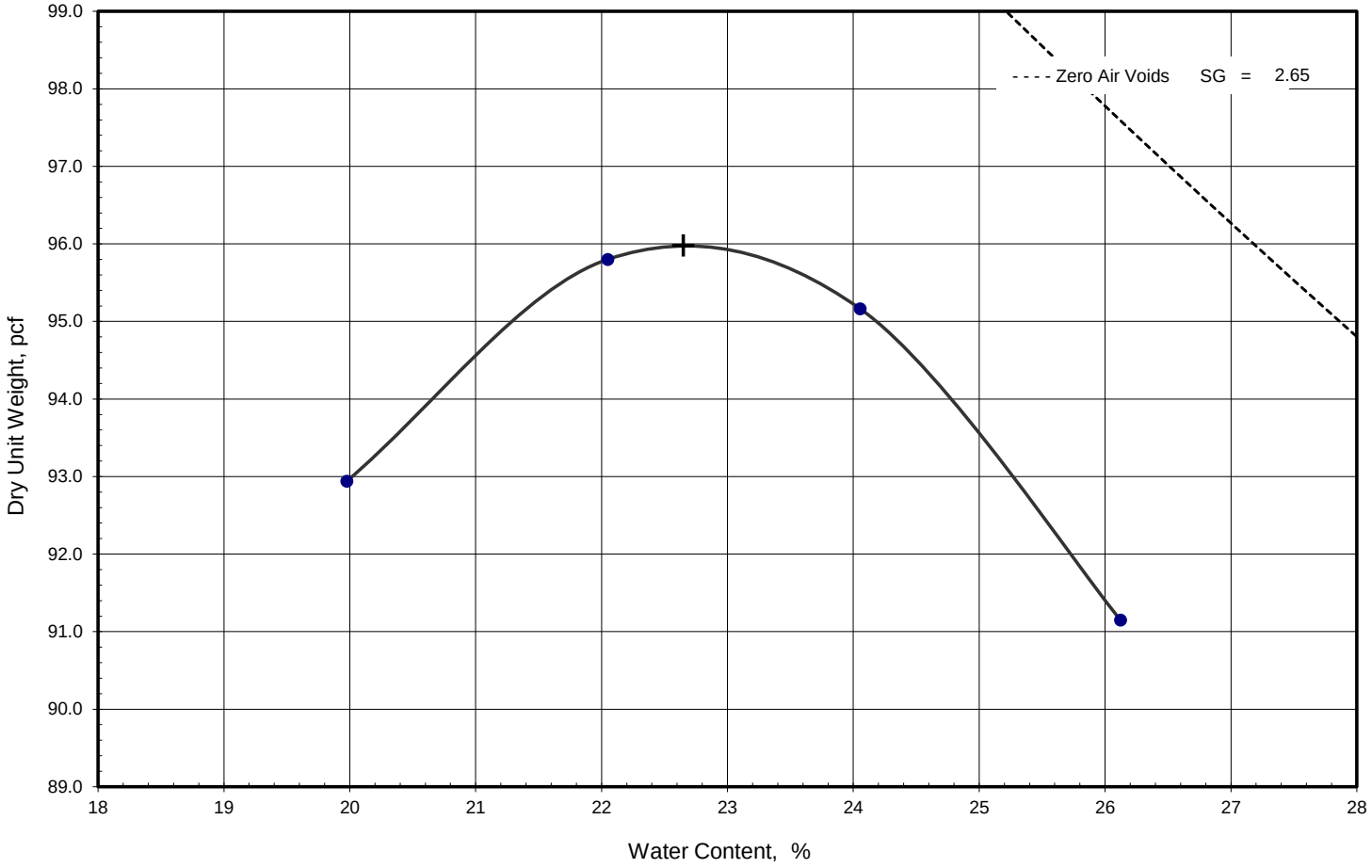
Project: Stone Garden - Unit 2A
Client: Lennar
Sample / Source: On-site Lime stabilized material at Granite Garden STA 11+00

Project No.: 20:1910
Depth (ft.): 0 - 1
Sample No.: D4S-13
Date Reported: 8/26/2025

Office / Lab	Address	Office Number / Fax
ECS Southwest LLP - San Antonio	431 Isom Road Suite 114 San Antonio, TX 78216	(210)528-1430 (214)483-9684

Tested by	Checked by	Approved by	Date Received	Remarks
fzuniga	fzuniga	fzuniga		

Laboratory Compaction Characteristics of Soil
Using Standard Effort



Optimum Moisture Content	**22.6**	%
Maximum Dry Unit Weight	**96.0**	pcf

Preparation	ASTM moist preparation
Type of rammer	Mechanical - circular face
Test Specfication / Method	ASTM D698-12e2-method A

Soil Description	Nat. Moist. %	Liquid Limit	Plasticity Index	%< #200	USCS	AASHTO
(SM) SILTY SAND, Reddish Brown	15.6		NP	12.5		A-2-4

Project: Stone Garden - Unit 2A
Client: Lennar
Sample / Source: On-site Lime stabilized material at Chalk Cave STA 3+50

Project No.: 20:1910
Depth (ft.): 0 - 1
Sample No.: D4S-14
Date Reported: 8/26/2025

Office / Lab	Address	Office Number / Fax
ECS Southwest LLP - San Antonio	431 Isom Road Suite 114 San Antonio, TX 78216	(210)528-1430 (214)483-9684

Tested by	Checked by	Approved by	Date Received	Remarks
fzuniga	fzuniga	fzuniga		

TX Registered Firm # F-8461

ECS Southwest, LLP
431 Isom Road, Suite 114
San Antonio, TX 78216
T 210.528.1430
F 214.483.9684

LETTER OF TRANSMITTAL

August 26, 2025
Lennar
100 NE Loop 410 Suite 1155
San Antonio, TX 78216

ATTN: Mr. Nathan Nowell

RE: **Stone Garden - Unit 2A**
ECS Job # **20:1910**

Permits:
Location: **14395 Old Corpus Christi Road**
Elmendorf, TX 78112

X Field Reports **X** For your use **X** As requested

CC: City of San Antonio - Development Services Department - Juan Ramirez
Lennar - Rogelio "Roy" Olivarez, Jr.
V.K. Knowlton Construction - Sammy Ramos

ENCL: Field Report # 85 8/26/2025 Lime gradation and Lime procto

Baruyr Ediki Baghdasarian, P.E.
Geotechnical Department Manager

Stephanie Marie Chavez
CMT Project Professional I

Disclaimer

1. *This report (and any attachments) shall not be reproduced except in full without prior written approval of ECS.*
2. *The information in this report relates only to the activities performed on the report date.*
3. *Where appropriate, this report includes statements as to compliance with applicable project drawings, and specifications for the activities, performed on this report date.*
4. *Incomplete or non-conforming work will be reported for future resolution.*
5. *The results of samples and/or specimens obtained or prepared for subsequent laboratory testing will be presented in separate reports/documents.*

TX Registered Engineering Firm # F-8461

ECS Southwest, LLP
431 Isom Road, Suite 114
San Antonio, TX 78216
T 210.528.1430
F 214.483.9684

FIELD REPORT

Project	**Stone Garden - Unit 2A**
Location	**Elmendorf, TX**
Client	**Lennar**
Contractor	**Lennar**

Project No.	**20:1910**
Report No.	**85**
Day & Date	**Tuesday 8/26/2025**
Weather	**85 °/ Sunny**
On-Site Time	**5.25**
Lab Time	**0.75**
Travel Time*	**1.00**
Total	**7.00**
Re Obs Time	**0.00**

Remarks **Lime gradation and Lime procto**

Trip Charges*	Tolls/Parking*	Mileage*	Time of	Arrival	Departure
35.00					
Chargeable Items				**10:00A**	**3:15P**

* Travel time and mileage will be billed in accordance with the contract.

Summary of Services Performed (field test data, locations, elevations & depths are estimates) & Individuals Contacted.

The undersigned arrived on-site, as requested to perform gradations for the lime treated subgrade.

Location:
Hornblende Trails
Giallo Place
Fiore Garden

Please see the attached sketch.

The applicable plans and geotechnical report were reviewed prior to testing. TxDOT Item 260 was performed for lime treated subgrade gradations. Sieve gradations appeared to meet the specifications.

SOIL SAMPLE PICK UP:
While on site, as requested, the undersigned obtained 3 samples of lime treated subgrade material for testing in our laboratory. The samples were obtained from the processed lime treated subgrade.

Locations:
Hornblende Trails near Azzurro Stone.
Giallo Place.
Fiore Garden near Azzurro Stone.

The three samples, approximately 2 buckets each, of material were obtained and returned to the laboratory for testing.

Prior to departure, Sammy Ramos with V.K. Knowlton was informed of the results of the day's observations.

By Nicolas Padeni 1800

Stabilization Field Gradation Test 1

Sieve no.	Sieve Opening (mm)	Mass of Soil retained (lb.)	Percent of mass retained (%)	Cumulative percent retained (%)	Percent finer passing (%)
1-3/4"	45.000				100.00
3/4"	19.000	0.02	0.20	0.20	99.80
#4	4.750	2.89	28.67	28.87	71.33
pan		7.17	71.13	100.00	
	Total Mass (lb)	10.08			

Gradation Requirements (Minimum % Passing)

Sieve Size	Subgrade
1-3/4"	100.00
3/4"	85.00
#4	60.00

Stabilization Field Gradation Test 2

Sieve no.	Sieve Opening (mm)	Mass of Soil retained (lb.)	Percent of mass retained (%)	Cumulative percent retained (%)	Percent finer passing (%)
1-3/4"	45.000				100.00
3/4"	19.000	0.17	1.13	1.13	98.87
#4	4.750	4.15	28.49	29.63	71.51
pan		10.25	70.37	100.00	
	Total Mass (lb)	14.57			

Gradation Requirements (Minimum % Passing)

Sieve Size	Subgrade
1-3/4"	100.00
3/4"	85.00
#4	60.00

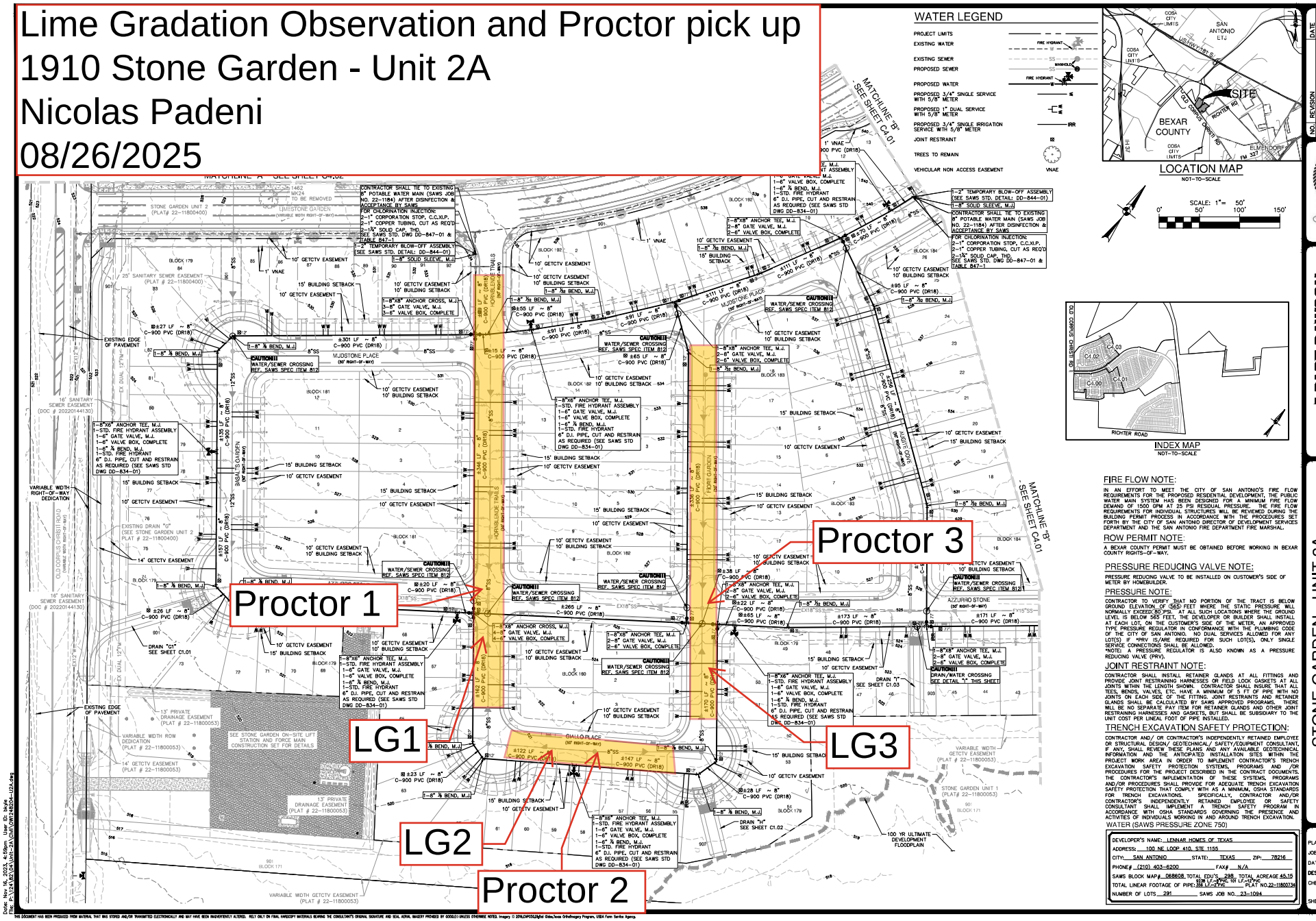
Stabilization Field Gradation Test 3

Sieve no.	Sieve Opening (mm)	Mass of Soil retained (lb.)	Percent of mass retained (%)	Cumulative percent retained (%)	Percent finer passing (%)
1-3/4"	45.000				100.00
3/4"	19.000	0.25	2.33	2.33	97.67
#4	4.750	4.07	38.71	41.04	61.29
pan		6.20	58.96	100.00	
	Total Mass (lb)	10.52			

Gradation Requirements (Minimum % Passing)

Sieve Size	Subgrade
1-3/4"	100.00
3/4"	85.00
#4	60.00

Lime Gradation Observation and Proctor pick up
1910 Stone Garden - Unit 2A
Nicolas Padeni
08/26/2025



FIRE FLOW NOTE:

IN AN EFFORT TO MEET THE CITY OF SAN ANTONIO'S FIRE FLOW REQUIREMENTS FOR THE PROPOSED RESIDENTIAL DEVELOPMENT, THE PUBLIC WATER MAIN SYSTEM HAS BEEN DESIGNED FOR A MINIMUM FIRE FLOW DEMAND OF 1500 GPM AT 25 PSI RESIDUAL PRESSURE. THE FIRE FLOW REQUIREMENTS FOR INDIVIDUAL STRUCTURES WILL BE REVIEWED DURING THE BUILDING PERMIT PROCESS IN ACCORDANCE WITH THE PROCEDURES SET FORTH BY THE CITY OF SAN ANTONIO DIRECTOR OF DEVELOPMENT SERVICES DEPARTMENT AND THE SAN ANTONIO FIRE DEPARTMENT FIRE MARSHAL.

ROW PERMIT NOTE:

A BEXAR COUNTY PERMIT MUST BE OBTAINED BEFORE WORKING IN BEXAR COUNTY RIGHTS-OF-WAY.

PRESSURE REDUCING VALVE NOTE:

PRESSURE REDUCING VALVE TO BE INSTALLED ON CUSTOMER'S SIDE OF METER BY HOMEBUILDER.

PRESSURE NOTE:

CONTRACTOR TO VERIFY THAT NO PORTION OF THE TRACT IS BELOW GROUND ELEVATION 565 FEET WHERE THE STATIC PRESSURE WILL NORMALLY EXCEED 80 PSI. AT ALL SUCH LOCATIONS WHERE THE GROUND LEVEL IS BELOW 565 FEET, THE DEVELOPER OR BUILDER SHALL INSTALL AT EACH LOT, ON THE CUSTOMER'S SIDE OF THE METER, AN APPROVED TYPE PRESSURE REGULATOR IN CONFORMANCE WITH THE PLUMBING CODE OF THE CITY OF SAN ANTONIO. NO SINGLE SERVICE ALLOWED FOR ANY LOT(S) IF *PRV IS/ARE REQUIRED FOR SUCH LOT(S), ONLY SINGLE SERVICE CONNECTIONS SHALL BE ALLOWED.
*NOTE: A PRESSURE REGULATOR IS ALSO KNOWN AS A PRESSURE REDUCING VALVE (PRV).

JOINT RESTRAINT NOTE:

CONTRACTOR SHALL INSTALL RETAINER GLANDS AT ALL FITTINGS AND PROVIDE JOINT RESTRAINING HARNESSES OR FIELD LOCK GASKETS AT ALL JOINTS WITHIN THE LENGTH SHOWN. CONTRACTOR SHALL INSURE THAT ALL TEES, BENDS, VALVES, ETC. HAVE A MINIMUM OF 5 FT OF PIPE WITH NO JOINTS ON EACH SIDE OF THE FITTING. JOINT RESTRAINTS AND RETAINER GLANDS SHALL BE CALCULATED BY SAWS APPROVED PROGRAMS. THERE WILL BE NO SEPARATE PAY ITEM FOR RETAINER GLANDS AND OTHER JOINT RESTRAINING HARNESSES AND GASKETS, BUT SHALL BE SUBSIDIARY TO THE UNIT COST PER LINEAL FOOT OF PIPE INSTALLED.

TRENCH EXCAVATION SAFETY PROTECTION:

CONTRACTOR AND/ OR CONTRACTOR'S INDEPENDENTLY RETAINED EMPLOYEE OR STRUCTURAL DESIGN/ GEOTECHNICAL/ SAFETY/EQUIPMENT CONSULTANT, IF ANY, SHALL REVIEW THESE PLANS AND ANY AVAILABLE GEOTECHNICAL INFORMATION AND THE ANTICIPATED INSTALLATION SITES WITHIN THE PROJECT WORK AREA IN ORDER TO IMPLEMENT CONTRACTOR'S TRENCH EXCAVATION SAFETY PROTECTION SYSTEMS, PROGRAMS AND /OR PROCEDURES FOR THE PROJECT DESCRIBED IN THE CONTRACT DOCUMENTS. THE CONTRACTOR'S IMPLEMENTATION OF THESE SYSTEMS, PROGRAMS AND/OR PROCEDURES SHALL PROVIDE FOR ADEQUATE TRENCH EXCAVATION SAFETY PROTECTION THAT COMPLY WITH AS A MINIMUM, OSHA STANDARDS FOR TRENCH EXCAVATIONS. SPECIFICALLY, CONTRACTOR AND/OR CONTRACTOR'S INDEPENDENTLY RETAINED EMPLOYEE OR SAFETY CONSULTANT SHALL IMPLEMENT A TRENCH SAFETY PROGRAM IN ACCORDANCE WITH OSHA STANDARDS GOVERNING THE PRESENCE AND ACTIVITIES OF INDIVIDUALS WORKING IN AND AROUND TRENCH EXCAVATION.

WATER (SAWS PRESSURE ZONE 750)

DEVELOPER'S NAME:	LENNAR HOMES OF TEXAS
ADDRESS:	100 NE LOOP 410, STE 1155
CITY: SAN ANTONIO	STATE: TEXAS ZIP: 78216
PHONE # (210) 403-6200	FAX # N/A
SAWS BLOCK MAP #	068608, TOTAL EDU'S 298, TOTAL ACREAGE 45.15
TOTAL LINEAR FOOTAGE OF PIPE:	8236 LF-8"PVC, 101 LF-12"PVC, PLAT NO. 22-11800734
NUMBER OF LOTS 291	SAWS JOB NO. 23-1094

PLAT NO. 22-11800734
JOB NO. 12482-04
DATE AUGUST 2023
DESIGNER JG
CHECKED DW DRAWN TC
SHEET C4.00

Attachments

Lime gradation and proctor pick up 2

Figure 1

Lime gradation and proctor pick up 1

Figure 2

Attachments

Lime gradation and proctor pick up 3

Figure 3

TX Registered Firm # F-8461

ECS Southwest, LLP
431 Isom Road, Suite 114
San Antonio, TX 78216
T 210.528.1430
F 214.483.9684

LETTER OF TRANSMITTAL

August 28, 2025
Lennar
100 NE Loop 410 Suite 1155
San Antonio, TX 78216

ATTN: Mr. Nathan Nowell

RE: **Stone Garden - Unit 2A**
ECS Job # **20:1910**

Permits:
Location: **14395 Old Corpus Christi Road**
Elmendorf, TX 78112

X Field Reports **X** For your use **X** As requested

CC: City of San Antonio - Development Services Department - Juan Ramirez
Lennar - Rogelio "Roy" Olivarez, Jr.
V.K. Knowlton Construction - Sammy Ramos

ENCL: Field Report # 86 8/27/2025 Soil Density Testing/ Pick up

Adam James Heiman, P.E.
Assistant Office Manager

Stephanie Marie Chavez
CMT Project Professional I

TX Registered Engineering Firm # F-8461

ECS Southwest, LLP
431 Isom Road, Suite 114
San Antonio, TX 78216
T 210.528.1430
F 214.483.9684

FIELD REPORT

Project	**Stone Garden - Unit 2A**
Location	**Elmendorf, TX**
Client	**Lennar**
Contractor	**Lennar**

Project No.	**20:1910**
Report No.	**86**
Day & Date	**Wednesday 8/27/2025**
Weather	**80 °/ Partly Cloudy**
On-Site Time	**4.00**
Lab Time	**0.75**
Travel Time*	**0.50**
Total	**5.25**
Re Obs Time	**0.00**

Remarks **Soil Density Testing/ Pick up**

Trip Charges*	Tolls/Parking*	Mileage*	Time of	Arrival	Departure
35.00				**7:30A**	**11:30A**
Chargeable Items **5000**					

* Travel time and mileage will be billed in accordance with the contract.

Summary of Services Performed (field test data, locations, elevations & depths are estimates) & Individuals Contacted.

As requested, the undersigned arrived on-site, to perform soil compaction testing of lime stabilized subgrade.

Location:
Granite Garden, Subgrade
Gabbro Cove, Subgrade
Chalk Cave, Subgrade

Please see the attached sketch and photo documentation.

Project documents reviewed include: Civil plan pages C4.02 and C4.03 dated 11/14/2023 and the Geotechnical Report dated 04/25/2022 were reviewed prior to testing.

Utilizing the Nuclear Method ASTM D6938, to check the compaction of lime stabilized subgrade at the areas and elevations tested.

The test results MET the project requirements of 95% of the corrected maximum dry density and a moisture content of -3% to 3% from optimum, as determined in our laboratory using the Standard Proctor Method ASTM D698.

Noted exceptions: NONE

LIME GRADATIONS:
The undersigned then performed gradations for the lime treated subgrade for Chalk Cave and Mudstone Place. Please see the attached sketch.

By Nicolas Padeni 1800

The applicable plans and geotechnical report were reviewed prior to testing. TxDOT Item 260 was performed for lime treated subgrade gradations. Sieve gradations appeared to meet the specifications.

SOIL SAMPLE PICK UP:
While on site, as requested, the undersigned obtained 2 samples of lime treated subgrade material for testing in our laboratory. The samples were obtained from the processed lime treated subgrade.

Locations:
Chalk Cave near STA 10+50.
Mudstone Place near STA 9+50.

The 2 samples, approximately 2 buckets each, of material were obtained
and returned to the laboratory for testing.

Prior to departure, Sammy Ramos with V.K. Knowlton was informed of the results of the day's observations.

Field Compaction Summary, D6938

Project No: 20:1910 Project Name: Stone Garden - Unit 2A Date: 8/27/2025

ECS Southwest, LLP

Client: Lennar

Contractor: Lennar

Technician: Nicolas Padeni

Test Method D6938			
Nuclear Gauge No. 76450			
Make	Troxler	Density Std	2553
Model	3430P	Moisture Std	695
Ser. No.	76450		

Sample No.	Description	Proctor Method	Uncorrected Max. Density	Uncorrected Optimum Moisture Content
D4S-13	**(SM) SILTY SAND, Reddish Brown**	**Standard Proctor Method (ASTM D-698)**	**99.2**	**20.4**
D4S-10	**(SM) SILTY SAND, Reddish Brown**	**Standard Proctor Method (ASTM D-698)**	**100.1**	**19.5**

Test No.	Lot No.	Test Mode	Probe Depth (in.)	Station / Location	Lift / Elev	Sample No.	% Oversize	Corrected Max. Density	Corrected Optimum Moisture Content (%)	Wet Density (pcf)	Dry Density (pcf)	Moisture Content (%)	Percent Comp. (%)	P / F	Comments
1		DT	6	Granite Garden STA 2+00	Subgrade	D4S-13	0.00	99.2	20.4	116.2	96.3	20.6	97.1	P	
2		DT	6	Granite Garden STA 3+50	Subgrade	D4S-10	0.00	100.1	19.5	120.2	101.6	18.4	101.5	P	
3		DT	6	Granite Garden STA 5+00	Subgrade	D4S-13	0.00	99.2	20.4	121.4	102.6	18.4	103.4	P	
4		DT	6	Granite Garden STA 6+50	Subgrade	D4S-13	0.00	99.2	20.4	118.8	100.4	18.3	101.2	P	
5		DT	6	Granite Garden STA 8+00	Subgrade	D4S-13	0.00	99.2	20.4	119.5	99.3	20.4	100.1	P	
6		DT	6	Granite Garden STA 10+00	Subgrade	D4S-13	0.00	99.2	20.4	120.9	101.9	18.7	102.7	P	
7		DT	6	Granite Garden STA 11+50	Subgrade	D4S-13	0.00	99.2	20.4	117.8	99.0	19.0	99.8	P	
8		DT	6	Granite Garden STA 13+00	Subgrade	D4S-13	0.00	99.2	20.4	119.0	101.0	17.9	101.8	P	
9		DT	6	Gabbro Cove STA 2+00	Subgrade	D4S-10	0.00	100.1	19.5	120.3	99.5	20.9	99.4	P	
10		DT	6	Gabbro Cove STA 3+50	Subgrade	D4S-10	0.00	100.1	19.5	120.3	102.3	17.6	102.2	P	

Test Mode: DT = Direct Transmission BS = Back Scatter

Field Compaction Summary, D6938

Project No: 20:1910 Project Name: Stone Garden - Unit 2A Date: 8/27/2025

ECS Southwest, LLP

Client: Lennar

Contractor: Lennar

Technician: Nicolas Padeni

Test Method D6938			
Nuclear Gauge No. 76450			
Make	Troxler	Density Std	2553
Model	3430P	Moisture Std	695
Ser. No.	76450		

Test No.	Lot No.	Test Mode	Probe Depth (in.)	Station / Location	Lift / Elev	Sample No.	% Oversize	Corrected Max. Density	Corrected Optimum Moisture Content (%)	Wet Density (pcf)	Dry Density (pcf)	Moisture Content (%)	Percent Comp. (%)	P / F	Comments
11		DT	6	Gabbro Cove STA 4+50	Subgrade	D4S-10	0.00	100.1	19.5	122.1	101.1	20.7	101.0	P	
12		DT	6	Chalk Cave STA 1+50	Subgrade	D4S-10	0.00	100.1	19.5	121.3	101.3	19.8	101.2	P	
13		DT	6	Chalk Cave STA 3+00	Subgrade	D4S-10	0.00	100.1	19.5	120.0	102.0	17.7	101.9	P	
14		DT	6	Chalk Cave STA 4+50	Subgrade	D4S-10	0.00	100.1	19.5	115.7	96.2	20.3	96.1	P	
15		DT	6	Chalk Cave STA 5+75	Subgrade	D4S-10	0.00	100.1	19.5	117.2	100.4	16.7	100.3	P	

Test Mode: DT = Direct Transmission BS = Back Scatter

WO: 45756

Stabilization Field Gradation Test 1

Sieve no.	Sieve Opening (mm)	Mass of Soil retained (lb.)	Percent of mass retained (%)	Cumulative percent retained (%)	Percent finer passing (%)
1-3/4"	45.000				100.00
3/4"	19.000	0.13	1.20	1.20	98.80
#4	4.750	3.37	31.12	32.32	68.88
pan		7.33	67.68	100.00	
	Total Mass (lb)	10.83			

Gradation Requirements (Minimum % Passing)

Sieve Size	Subgrade
1-3/4"	100.00
3/4"	85.00
#4	60.00

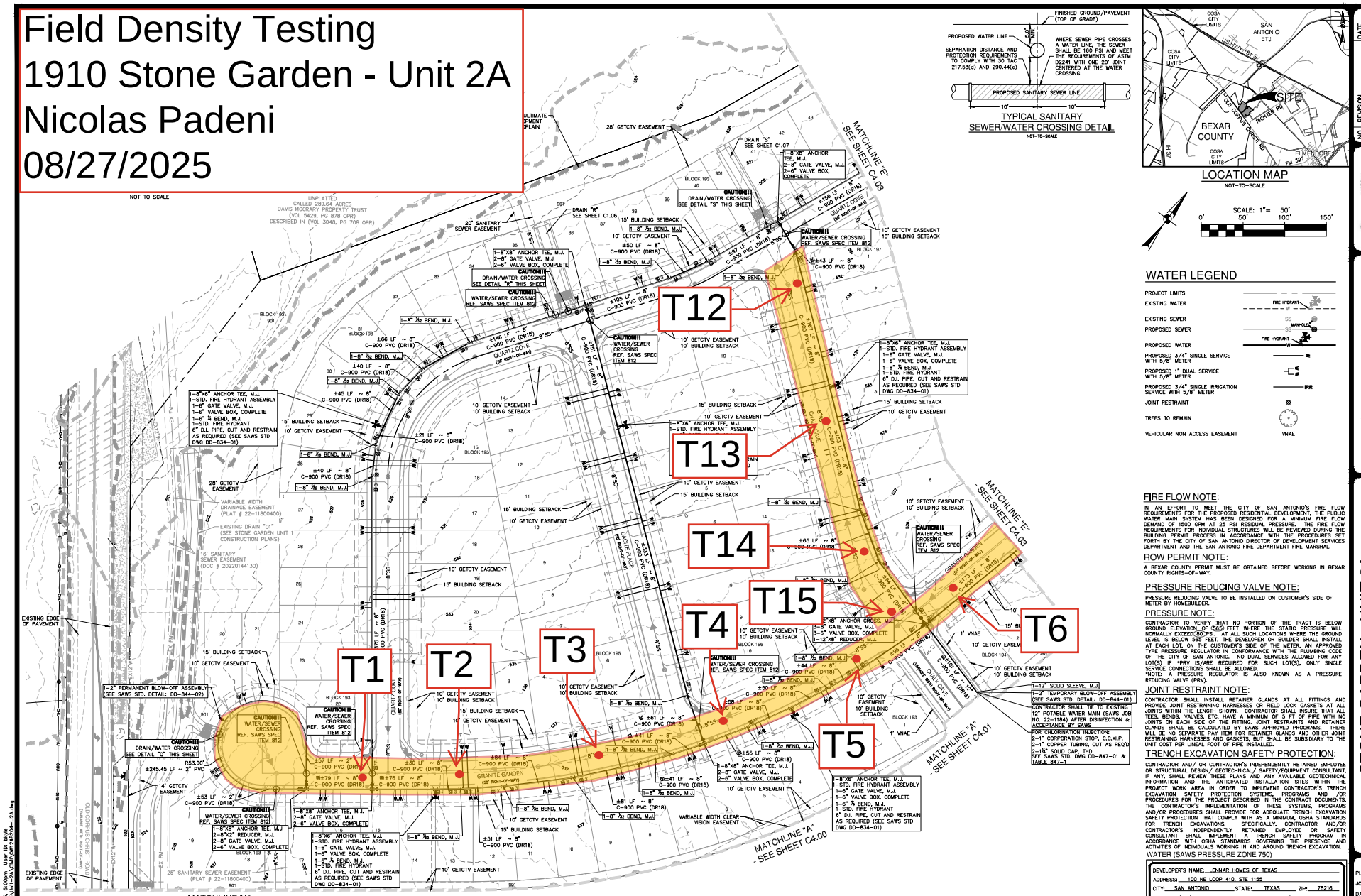
Stabilization Field Gradation Test 2

Sieve no.	Sieve Opening (mm)	Mass of Soil retained (lb.)	Percent of mass retained (%)	Cumulative percent retained (%)	Percent finer passing (%)
1-3/4"	45.000				100.00
3/4"	19.000	0.18	1.54	1.54	98.46
#4	4.750	3.18	28.01	29.55	71.99
pan		8.00	70.45	100.00	
	Total Mass (lb)	11.36			

Gradation Requirements (Minimum % Passing)

Sieve Size	Subgrade
1-3/4"	100.00
3/4"	85.00
#4	60.00

Field Density Testing
1910 Stone Garden - Unit 2A
Nicolas Padeni
08/27/2025



TYPICAL SANITARY SEWER/WATER CROSSING DETAIL
NOT-TO-SCALE

LOCATION MAP
NOT-TO-SCALE

SCALE: 1"= 50'
0' 50' 100' 150'

WATER LEGEND

PROJECT LIMITS
EXISTING WATER
EXISTING SEWER
PROPOSED SEWER
PROPOSED WATER
PROPOSED 3/4" SINGLE SERVICE WITH 5/8" METER
PROPOSED 1" DUAL SERVICE WITH 5/8" METER
PROPOSED 3/4" SINGLE IRRIGATION SERVICE WITH 5/8" METER
JOINT RESTRAINT
TREES TO REMAIN
VEHICULAR NON ACCESS EASEMENT

FIRE FLOW NOTE:

IN AN EFFORT TO MEET THE CITY OF SAN ANTONIO'S FIRE FLOW REQUIREMENTS FOR THE PROPOSED RESIDENTIAL DEVELOPMENT, THE PUBLIC WATER MAIN SYSTEM HAS BEEN DESIGNED FOR A MINIMUM FIRE FLOW DEMAND OF 1500 GPM AT 25 PSI RESIDUAL PRESSURE. THE FIRE FLOW REQUIREMENTS FOR INDIVIDUAL STRUCTURES WILL BE REVIEWED DURING THE BUILDING PERMIT PROCESS IN ACCORDANCE WITH THE PROCEDURES SET FORTH BY THE CITY OF SAN ANTONIO DIRECTOR OF DEVELOPMENT SERVICES DEPARTMENT AND THE SAN ANTONIO FIRE DEPARTMENT FIRE MARSHAL.

ROW PERMIT NOTE:

A BEXAR COUNTY PERMIT MUST BE OBTAINED BEFORE WORKING IN BEXAR COUNTY RIGHTS-OF-WAY.

PRESSURE REDUCING VALVE NOTE:

PRESSURE REDUCING VALVE TO BE INSTALLED ON CUSTOMER'S SIDE OF METER BY HOMEBUILDER.

PRESSURE NOTE:

CONTRACTOR TO VERIFY THAT NO PORTION OF THE TRACT IS BELOW GROUND ELEVATION OF (585) FEET WHERE THE STATIC PRESSURE WILL NORMALLY EXCEED 80 PSI. AT ALL SUCH LOCATIONS WHERE THE GROUND LEVEL IS BELOW 585 FEET, THE DEVELOPER OR BUILDER SHALL INSTALL AT EACH LOT, ON THE CUSTOMER'S SIDE OF THE METER, AN APPROVED TYPE PRESSURE REGULATOR IN CONFORMANCE WITH THE PLUMBING CODE OF THE CITY OF SAN ANTONIO. NO DUAL SERVICES ALLOWED FOR ANY LOT(S) IF *PRV IS/ARE REQUIRED FOR SUCH LOT(S), ONLY SINGLE SERVICE CONNECTIONS SHALL BE ALLOWED.
*NOTE: A PRESSURE REGULATOR IS ALSO KNOWN AS A PRESSURE REDUCING VALVE (PRV).

JOINT RESTRAINT NOTE:

CONTRACTOR SHALL INSTALL RETAINER GLANDS AT ALL FITTINGS AND PROVIDE JOINT RESTRAINING HARNESSES OR FIELD LOCK GASKETS AT ALL JOINTS WITHIN THE LENGTH SHOWN. CONTRACTOR SHALL INSURE THAT ALL TEES, BENDS, VALVES, ETC. HAVE A MINIMUM OF 5 FT OF PIPE WITH NO JOINTS ON EACH SIDE OF THE FITTING. JOINT RESTRAINTS AND RETAINER GLANDS SHALL BE CALCULATED BY SAWS APPROVED PROGRAMS. THERE WILL BE NO SEPARATE PAY ITEM FOR RETAINER GLANDS AND OTHER JOINT RESTRAINING HARNESSES AND GASKETS, BUT SHALL BE SUBSIDIARY TO THE UNIT COST PER LINEAL FOOT OF PIPE INSTALLED.

TRENCH EXCAVATION SAFETY PROTECTION:

CONTRACTOR AND/ OR CONTRACTOR'S INDEPENDENTLY RETAINED EMPLOYEE OR STRUCTURAL DESIGN/ GEOTECHNICAL/ SAFETY/EQUIPMENT CONSULTANT, IF ANY, SHALL REVIEW THESE PLANS AND ANY AVAILABLE GEOTECHNICAL INFORMATION AND THE ANTICIPATED INSTALLATION SITES WITHIN THE PROJECT WORK AREA IN ORDER TO IMPLEMENT CONTRACTOR'S TRENCH EXCAVATION SAFETY PROTECTION SYSTEMS, PROGRAMS AND /OR PROCEDURES FOR THE PROJECT DESCRIBED IN THE CONTRACT DOCUMENTS. THE CONTRACTOR'S IMPLEMENTATION OF THESE SYSTEMS, PROGRAMS AND/OR PROCEDURES SHALL PROVIDE FOR ADEQUATE TRENCH EXCAVATION SAFETY PROTECTION THAT COMPLY WITH AS A MINIMUM, OSHA STANDARDS FOR TRENCH EXCAVATIONS. SPECIFICALLY, CONTRACTOR AND/OR CONTRACTOR'S INDEPENDENTLY RETAINED EMPLOYEE OR SAFETY CONSULTANT SHALL IMPLEMENT A TRENCH SAFETY PROGRAM IN ACCORDANCE WITH OSHA STANDARDS GOVERNING THE PRESENCE AND ACTIVITIES OF INDIVIDUALS WORKING IN AND AROUND TRENCH EXCAVATION.

WATER (SAWS PRESSURE ZONE 750)

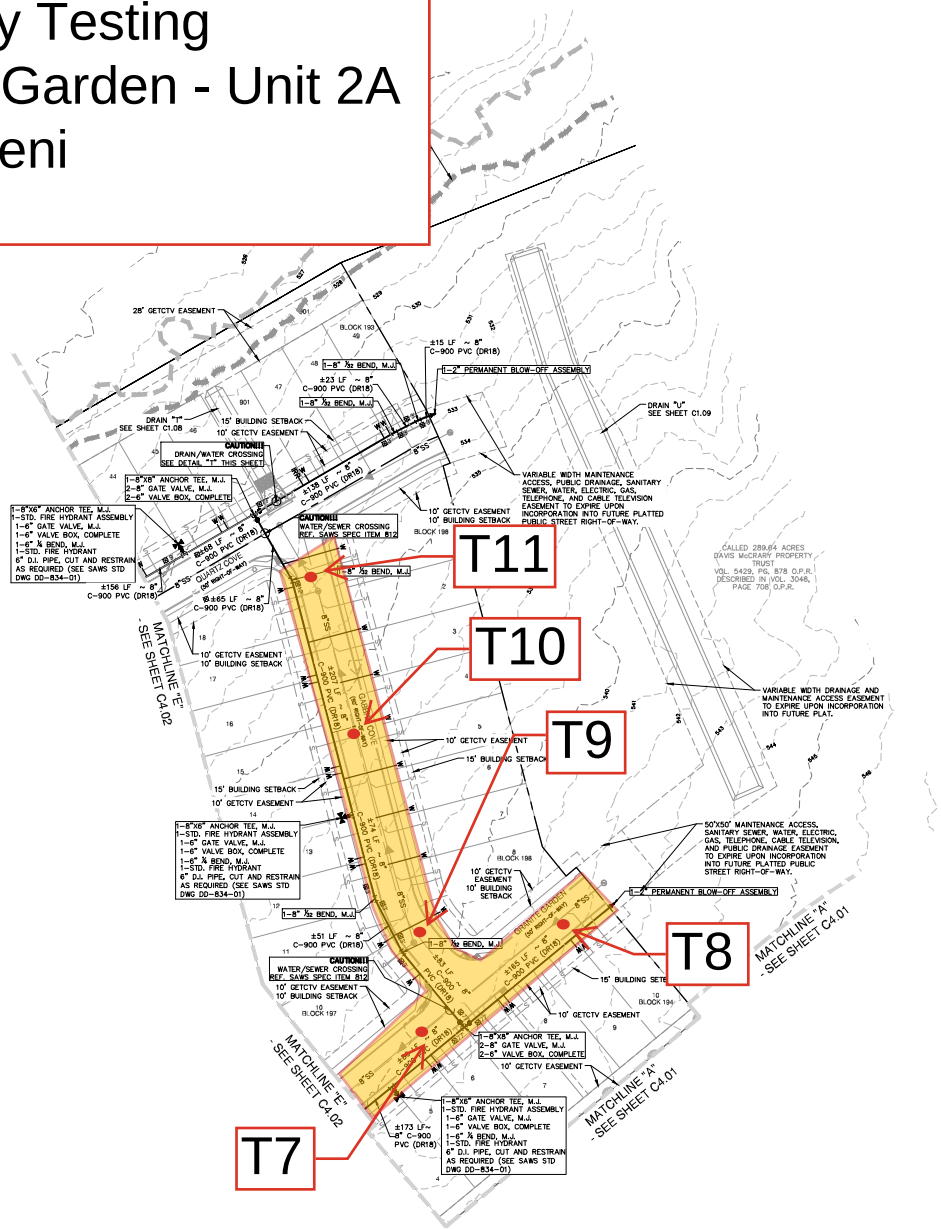
DEVELOPER'S NAME:	LENNAR HOMES OF TEXAS
ADDRESS:	100 NE LOOP 410, STE 1155
CITY:	SAN ANTONIO STATE: TEXAS ZIP: 78216
PHONE#	(210) 403-6200 FAX# N/A
SAWS BLOCK MAP#	068608, TOTAL EDU'S 298, TOTAL ACREAGE 45.15
TOTAL LINEAR FOOTAGE OF PIPE:	8" PVC LF=2,175, 6" PVC LF=173, PLAT NO.22-11800734
NUMBER OF LOTS	291 SAWS JOB NO. 23-1094

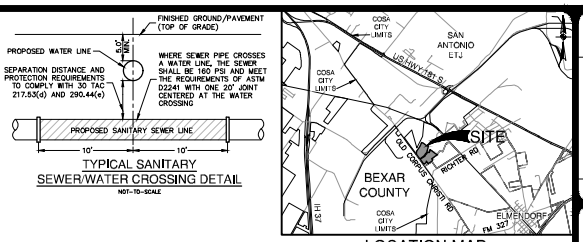
PAPE-DAWSON ENGINEERS
SAN ANTONIO | AUSTIN | HOUSTON | FORT WORTH | DALLAS
2000 NW LOOP 410 | SAN ANTONIO, TX 78213 | 210.375.9000
TEXAS ENGINEERING FIRM #470 | TEXAS SURVEYING FIRM #100980-00

STONE GARDEN - UNIT 2A
BEXAR COUNTY, TEXAS
OVERALL WATER DISTRIBUTION PLAN

PLAT NO. 22-11800734
JOB NO. 12482-04
DATE AUGUST 2023
DESIGNER JG
CHECKED DW DRAWN TC
SHEET C4.02

Field Density Testing
1910 Stone Garden - Unit 2A
Nicolas Padeni
08/27/2025





LOCATION MAP
NOT-TO-SCALE

SCALE: 1"= 50'
0' 50' 100' 150'

WATER LEGEND

PROJECT LIMITS
EXISTING WATER — FIRE HYDRANT
EXISTING SEWER — MANHOLE
PROPOSED SEWER — MANHOLE
PROPOSED WATER — FIRE HYDRANT
PROPOSED 3/4" SINGLE SERVICE WITH 5/8" METER
PROPOSED 1" DUAL SERVICE WITH 5/8" METER
PROPOSED 3/4" SINGLE IRRIGATION SERVICE WITH 5/8" METER — IRR
JOINT RESTRAINT
TREES TO REMAIN
VEHICULAR NON ACCESS EASEMENT — VNAE

FIRE FLOW NOTE:

IN AN EFFORT TO MEET THE CITY OF SAN ANTONIO'S FIRE FLOW REQUIREMENTS FOR THE PROPOSED RESIDENTIAL DEVELOPMENT, THE PUBLIC WATER MAIN SYSTEM HAS BEEN DESIGNED FOR A MINIMUM FIRE FLOW DEMAND OF 1500 GPM AT 25 PSI RESIDUAL PRESSURE. THE FIRE FLOW REQUIREMENTS FOR INDIVIDUAL STRUCTURES WILL BE REVIEWED DURING THE BUILDING PERMIT PROCESS IN ACCORDANCE WITH THE PROCEDURES SET FORTH BY THE CITY OF SAN ANTONIO DIRECTOR OF DEVELOPMENT SERVICES DEPARTMENT AND THE SAN ANTONIO FIRE DEPARTMENT FIRE MARSHAL.

ROW PERMIT NOTE:

A BEXAR COUNTY PERMIT MUST BE OBTAINED BEFORE WORKING IN BEXAR COUNTY RIGHTS-OF-WAY.

PRESSURE REDUCING VALVE NOTE:

PRESSURE REDUCING VALVE TO BE INSTALLED ON CUSTOMER'S SIDE OF METER BY HOMEBUILDER.

PRESSURE NOTE:

CONTRACTOR TO VERIFY THAT NO PORTION OF THE TRACT IS BELOW GROUND ELEVATION OF (585) FEET WHERE THE STATIC PRESSURE WILL NORMALLY EXCEED 80 PSI. AT ALL SUCH LOCATIONS WHERE THE GROUND LEVEL IS BELOW 585 FEET, THE DEVELOPER OR BUILDER SHALL INSTALL AT EACH LOT, ON THE CUSTOMER'S SIDE OF THE METER, AN APPROVED TYPE PRESSURE REGULATOR IN CONFORMANCE WITH THE PLUMBING CODE OF THE CITY OF SAN ANTONIO. NO DUAL SERVICES ALLOWED FOR ANY LOT(S) IF *PRV IS/ARE REQUIRED FOR SUCH LOT(S), ONLY SINGLE SERVICE CONNECTIONS SHALL BE ALLOWED.
*NOTE: A PRESSURE REGULATOR IS ALSO KNOWN AS A PRESSURE REDUCING VALVE (PRV).

JOINT RESTRAINT NOTE:

CONTRACTOR SHALL INSTALL RETAINER GLANDS AT ALL FITTINGS AND PROVIDE JOINT RESTRAINING HARNESSES OR FIELD LOCK GASKETS AT ALL JOINTS WITHIN THE LENGTH SHOWN. CONTRACTOR SHALL INSURE THAT ALL TEES, BENDS, VALVES, ETC. HAVE A MINIMUM OF 5 FT OF PIPE WITH NO JOINTS ON EACH SIDE OF THE FITTING. JOINT RESTRAINTS AND RETAINER GLANDS SHALL BE CALCULATED BY SAWS APPROVED PROGRAMS. THERE WILL BE NO SEPARATE PAY ITEM FOR RETAINER GLANDS AND OTHER JOINT RESTRAINING HARNESSES AND GASKETS, BUT SHALL BE SUBSIDIARY TO THE UNIT COST PER LINEAL FOOT OF PIPE INSTALLED.

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WATER (SAWS PRESSURE ZONE 750)

DEVELOPER'S NAME: LENNAR HOMES OF TEXAS
ADDRESS: 100 NE LOOP 410, STE 1155
CITY: SAN ANTONIO STATE: TEXAS ZIP: 78216
PHONE# (210) 403-6200 FAX# N/A
SAWS BLOCK MAP# 068608 TOTAL EDU'S 298 TOTAL ACREAGE 45.15
TOTAL LINEAR FOOTAGE OF PIPE: 9238 LF-8"PVC, 101 LF-12"PVC, 256 LF-6"PVC PLAT NO. 22-11800734
NUMBER OF LOTS 291 SAWS JOB NO. 23-1094

NO. REVISION | DATE

EUGENE H. DAWSON III 112702 LICENSED PROFESSIONAL ENGINEER 11/14/23

PAPE-DAWSON ENGINEERS
SAN ANTONIO | AUSTIN | HOUSTON | FORT WORTH | DALLAS
2000 NW LOOP 410 | SAN ANTONIO, TX 78213 | 210.375.9000
TEXAS ENGINEERING FIRM #470 | TEXAS SURVEYING FIRM #100980-00

STONE GARDEN - UNIT 2A
BEXAR COUNTY, TEXAS
OVERALL WATER DISTRIBUTION PLAN

PLAT NO. 22-11800734
JOB NO. 12482-04
DATE AUGUST 2023
DESIGNER JG
CHECKED DW DRAWN TC
SHEET C4.03

Date: Nov 16, 2023, 4:49pm User ID: MyM
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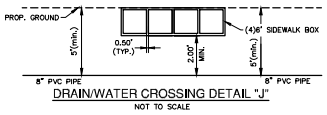
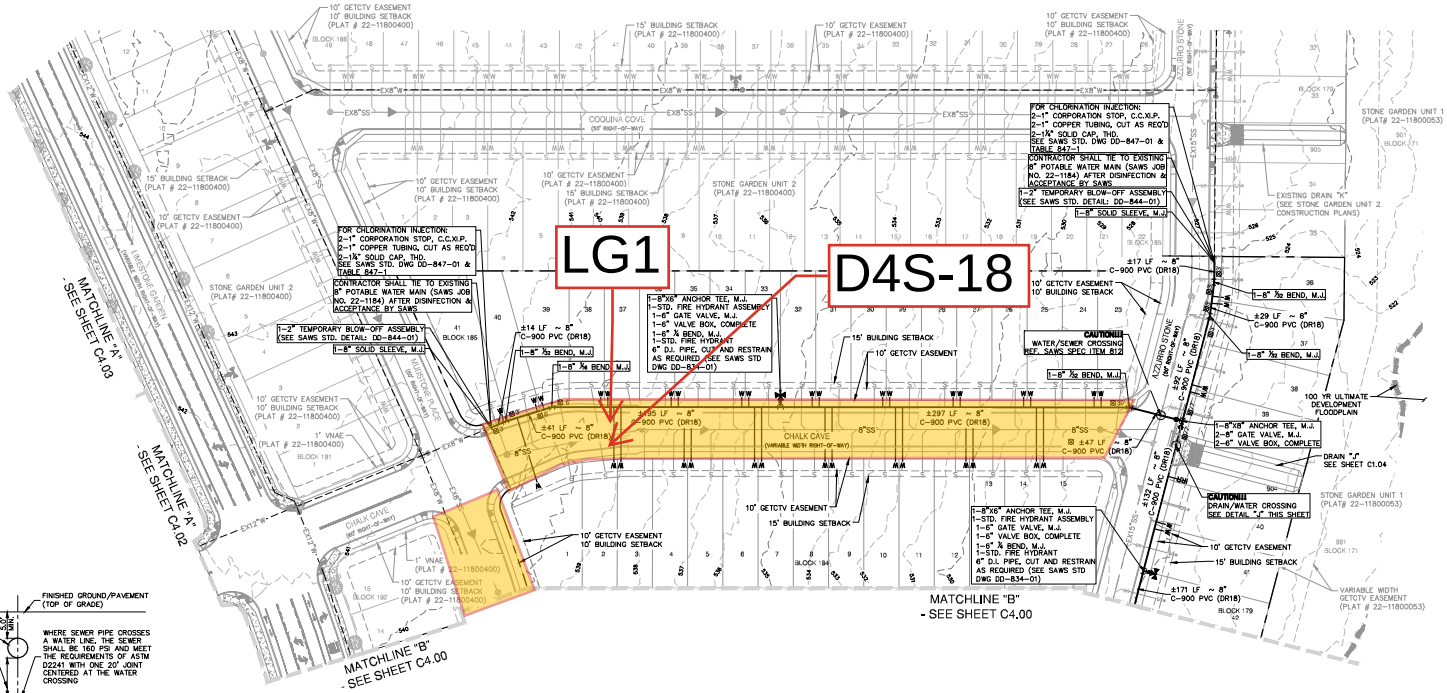
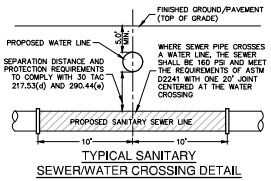


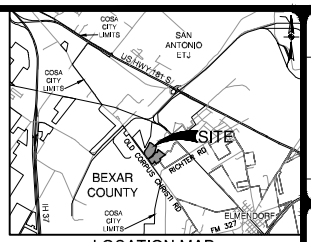
DRAIN/WATER CROSSING DETAIL "J"
NOT TO SCALE

Lime Gradation Observation and Proctor pick up
1910 Stone Garden - Unit 2A
Nicolas Padeni
08/27/2025

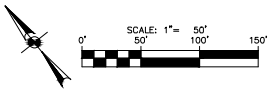




TYPICAL SANITARY SEWER/WATER CROSSING DETAIL
NOT-TO-SCALE



LOCATION MAP
NOT-TO-SCALE



WATER LEGEND

PROJECT LIMITS
EXISTING WATER — FIRE HYDRANT
EXISTING SEWER — MANHOLE
PROPOSED SEWER
PROPOSED WATER — FIRE HYDRANT
PROPOSED 3/4" SINGLE SERVICE WITH 5/8" METER
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PRESSURE NOTE:

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WATER (SAWS PRESSURE ZONE 750)

DEVELOPER'S NAME: LENNAR HOMES OF TEXAS
ADDRESS: 100 NE LOOP 410, STE 1155
CITY: SAN ANTONIO STATE: TEXAS ZIP: 78216
PHONE# (210) 403-6200 FAX# N/A
SAWS BLOCK MAP# 068608 TOTAL EDU'S 298 TOTAL ACREAGE 45.15
TOTAL LINEAR FOOTAGE OF PIPE: 9238 LF-8"PVC, 101 LF-12"PVC, 356 LF-6"PVC PLAT NO. 22-11800734
NUMBER OF LOTS 291 SAWS JOB NO. 23-1094

NO.	REVISION	DATE

EUGENE H. DAWSON III 112702 LICENSED PROFESSIONAL ENGINEER 11/14/23

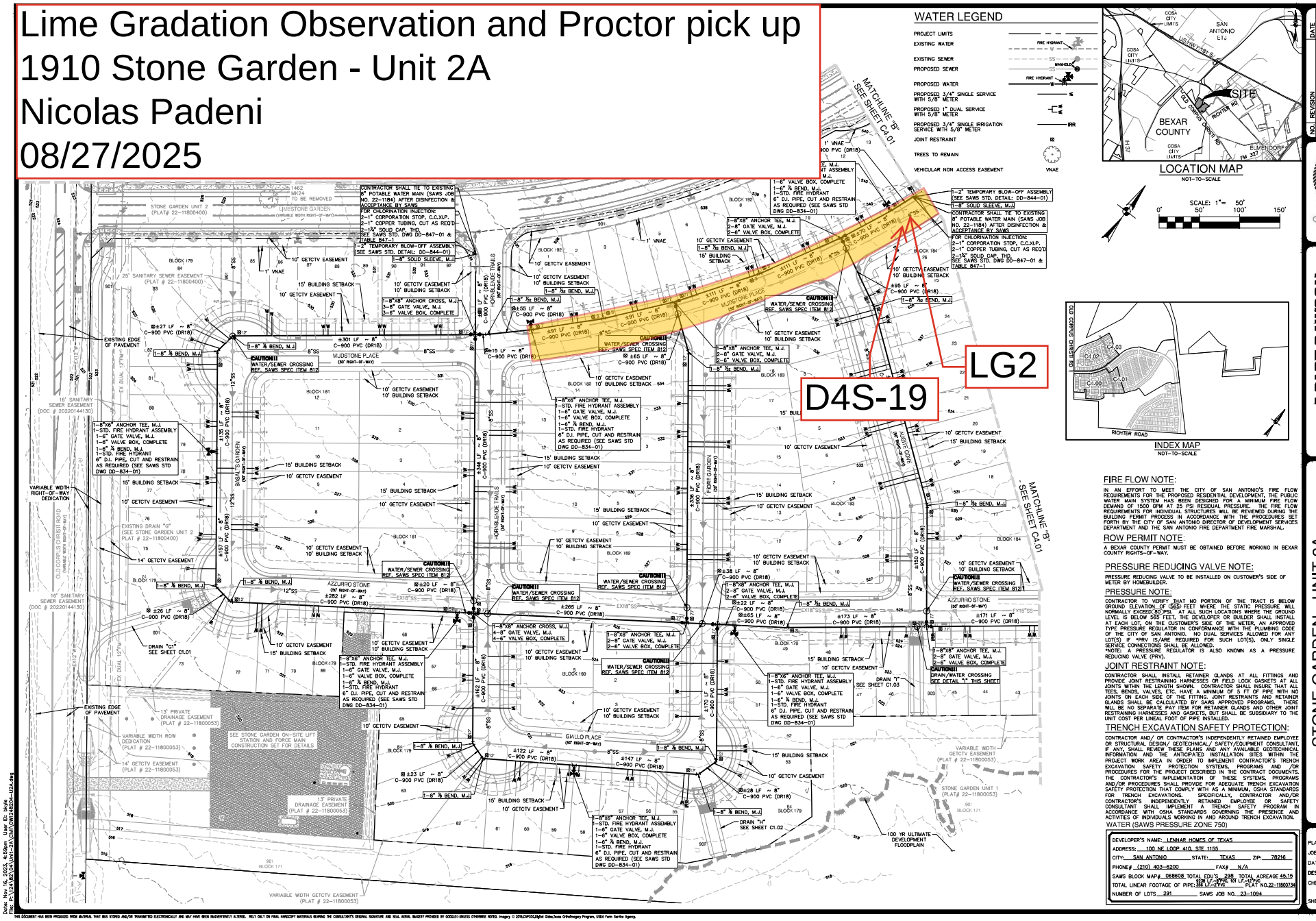
PAPE-DAWSON ENGINEERS
SAN ANTONIO | AUSTIN | HOUSTON | FORT WORTH | DALLAS
2000 NW LOOP 410 | SAN ANTONIO, TX 78213 | 210.375.9000
TEXAS ENGINEERING FIRM #470 | TEXAS SURVEYING FIRM #100800

STONE GARDEN - UNIT 2A
BEXAR COUNTY, TEXAS
OVERALL WATER DISTRIBUTION PLAN

PLAT NO. 22-11800734
JOB NO. 12482-04
DATE AUGUST 2023
DESIGNER JG
CHECKED DW DRAWN TC
SHEET C4.01

Date: Nov 16, 2023, 5:00pm User ID: MHe
File: P:\12482\03\04\Unit-2A\Civil\Dwg\12482504-U2A.dwg

Lime Gradation Observation and Proctor pick up
1910 Stone Garden - Unit 2A
Nicolas Padeni
08/27/2025



Attachments

View of granite garden

Figure 1

View of granite garden

Figure 2

TX Registered Firm # F-8461

ECS Southwest, LLP
431 Isom Road, Suite 114
San Antonio, TX 78216
T 210.528.1430
F 214.483.9684

LETTER OF TRANSMITTAL

September 02, 2025
Lennar
100 NE Loop 410 Suite 1155
San Antonio, TX 78216

ATTN: Mr. Nathan Nowell

RE: **Stone Garden - Unit 2A**
ECS Job # **20:1910**

Permits:
Location: **14395 Old Corpus Christi Road**
Elmendorf, TX 78112

X Field Reports **X** For your use **X** As requested

CC: City of San Antonio - Development Services Department - Juan Ramirez
Lennar - Rogelio "Roy" Olivarez, Jr.
V.K. Knowlton Construction - Sammy Ramos

ENCL: Field Report # 87 8/29/2025 Soil Densities (Pavement Base)

Frank M. Munoz
Office Manager

Stephanie Marie Chavez
CMT Project Professional I

TX Registered Engineering Firm # F-8461

ECS Southwest, LLP
431 Isom Road, Suite 114
San Antonio, TX 78216
T 210.528.1430
F 214.483.9684

FIELD REPORT

Project	**Stone Garden - Unit 2A**
Location	**Elmendorf, TX**
Client	**Lennar**
Contractor	**Lennar**

Project No.	**20:1910**
Report No.	**87**
Day & Date	**Friday 8/29/2025**
Weather	**81 °/ Fair**
On-Site Time	**2.75**
Lab Time	**0.50**
Travel Time*	**0.50**
Total	**3.75**
Re Obs Time	**0.00**

Remarks **Soil Densities (Pavement Base)**

Trip Charges*	Tolls/Parking*	Mileage*	Time of	Arrival	Departure
35.00				**8:00A**	**10:45A**
Chargeable Items **5000**					

* Travel time and mileage will be billed in accordance with the contract.

Summary of Services Performed (field test data, locations, elevations & depths are estimates) & Individuals Contacted.

The undersigned arrived on-site, as requested to observe the placement and compaction of base material.

Location:
Granite Garden
Quartz Cove

Please see the attached sketch.

Civil plan page C2.16 dated 09/11/23 and Geotechnical Report dated 04/25/22 were reviewed prior to testing.

Utilizing the Nuclear Method ASTM D6938, to check the compaction of base material at the areas and elevations tested, test results met the project requirements of 95% of the corrected maximum dry density and a moisture content of -2% to 3% from optimum, as determined in our laboratory using the State Proctor Method TEX-113-E.

Prior to departure, Sammy Ramos with V.K. Knowlton was informed of the results of the day's testing and observations.

By Sergio A Trevino 1800

Field Compaction Summary, D6938

Project No: 20:1910 Project Name: Stone Garden - Unit 2A Date: 8/29/2025

ECS Southwest, LLP

Client: Lennar

Contractor: Lennar

Technician: Sergio A Trevino

Test Method D6938			
Nuclear Gauge No. 78650			
Make	Troxler	Density Std	2288
Model	3430P	Moisture Std	655
Ser. No.	78650		

Sample No.	Description	Proctor Method	Uncorrected Max. Density	Uncorrected Optimum Moisture Content
D4S-12	**(GP-GC) POORLY GRADED GRAVEL WITH SILTY CLAY & SAND, Light Tan**	**TEX-113-E**	**137.7**	**4.5**

Test No.	Lot No.	Test Mode	Probe Depth (in.)	Station / Location	Lift / Elev	Sample No.	% Oversize	Corrected Max. Density	Corrected Optimum Moisture Content (%)	Wet Density (pcf)	Dry Density (pcf)	Moisture Content (%)	Percent Comp. (%)	P / F	Comments
1		DT	6	Quartz Cove, STA 13+50	1	D4S-12	0.00	137.7	4.5	141.3	134.2	5.3	97.5	P	
2		DT	6	Quartz Cove, STA 12+00	1	D4S-12	0.00	137.7	4.5	151.1	141.6	6.6	102.8	P	
3		DT	6	Quartz Cove, STA 10+50	1	D4S-12	0.00	137.7	4.5	144.0	135.2	6.5	98.2	P	
4		DT	6	Quartz Cove, STA 9+00	1	D4S-12	0.00	137.7	4.5	137.4	130.9	4.9	95.1	P	
5		DT	6	Quartz Cove, STA 7+50	1	D4S-12	0.00	137.7	4.5	140.3	132.2	6.1	96.0	P	
6		DT	6	Quartz Cove, STA 6+00	1	D4S-12	0.00	137.7	4.5	149.3	140.8	6.0	102.3	P	
7		DT	6	Quartz Cove, STA 4+50	1	D4S-12	0.00	137.7	4.5	145.1	137.5	5.5	99.9	P	
8		DT	6	Quartz Cove, STA 3+00	1	D4S-12	0.00	137.7	4.5	148.5	140.8	5.5	102.3	P	
9		DT	6	Quartz Cove, STA 1+50	1	D4S-12	0.00	137.7	4.5	141.6	133.7	6.0	97.1	P	
10		DT	6	Granite Garden, STA 2+00	1	D4S-12	0.00	137.7	4.5	143.9	134.4	7.1	97.6	P	

Test Mode: DT = Direct Transmission BS = Back Scatter

WO: 45945

Field Compaction Summary, D6938

Project No: 20:1910 Project Name: Stone Garden - Unit 2A Date: 8/29/2025

ECS Southwest, LLP

Client: Lennar

Contractor: Lennar

Technician: Sergio A Trevino

Test Method D6938			
Nuclear Gauge No. 78650			
Make	Troxler	Density Std	2288
Model	3430P	Moisture Std	655
Ser. No.	78650		

Test No.	Lot No.	Test Mode	Probe Depth (in.)	Station / Location	Lift / Elev	Sample No.	% Oversize	Corrected Max. Density	Corrected Optimum Moisture Content (%)	Wet Density (pcf)	Dry Density (pcf)	Moisture Content (%)	Percent Comp. (%)	P / F	Comments
11		DT	6	Granite Garden, STA 3+50	1	D4S-12	0.00	137.7	4.5	144.9	135.5	6.9	98.4	P	
12		DT	6	Granite Garden, STA 5+00	1	D4S-12	0.00	137.7	4.5	145.0	136.3	6.4	99.0	P	
13		DT	6	Granite Garden, STA 6+50	1	D4S-12	0.00	137.7	4.5	139.2	131.1	6.2	95.2	P	
14		DT	6	Granite Garden, STA 8+00	1	D4S-12	0.00	137.7	4.5	143.6	136.0	5.6	98.8	P	

Attachments

Area tested

Figure 1

Area tested

Figure 2

Attachments

Area tested

Figure 3

TX Registered Firm # F-8461

ECS Southwest, LLP
431 Isom Road, Suite 114
San Antonio, TX 78216
T 210.528.1430
F 214.483.9684

LETTER OF TRANSMITTAL

September 03, 2025
Lennar
100 NE Loop 410 Suite 1155
San Antonio, TX 78216

ATTN: Mr. Nathan Nowell

RE: **Stone Garden - Unit 2A**
ECS Job # **20:1910**

Permits:
Location: **14395 Old Corpus Christi Road**
Elmendorf, TX 78112

X Field Reports **X** For your use **X** As requested

CC: City of San Antonio - Development Services Department - Juan Ramirez
Lennar - Rogelio "Roy" Olivarez, Jr.
V.K. Knowlton Construction - Sammy Ramos

ENCL: Field Report # 88 9/3/2025 Soil Density Testing

Adam James Heiman, P.E.
Assistant Office Manager

Stephanie Marie Chavez
CMT Project Professional I

TX Registered Engineering Firm # F-8461

ECS Southwest, LLP
431 Isom Road, Suite 114
San Antonio, TX 78216
T 210.528.1430
F 214.483.9684

FIELD REPORT

Project	**Stone Garden - Unit 2A**
Location	**Elmendorf, TX**
Client	**Lennar**
Contractor	**Lennar**

Project No.	**20:1910**
Report No.	**88**
Day & Date	**Wednesday 9/3/2025**
Weather	**95 °/ Sunny**
On-Site Time	**1.75**
Lab Time	**0.50**
Travel Time*	**1.25**
Total	**3.50**
Re Obs Time	**0.00**

Remarks **Soil Density Testing**

Trip Charges*	Tolls/Parking*	Mileage*	Time of	Arrival	Departure
35.00				**9:45A**	**11:30A**
Chargeable Items **5000**					

* Travel time and mileage will be billed in accordance with the contract.

Summary of Services Performed (field test data, locations, elevations & depths are estimates) & Individuals Contacted.

As requested, the undersigned arrived on-site, to perform soil compaction testing on Base material.

Location:
Chalk Cave
Gabbro Cove

Please see the attached sketch.

Civil plan page C7.00 Dated 11/14/23 and the Geotechnical Report dated 4/25/22 were reviewed prior to testing.

Utilizing the Nuclear Method ASTM D6938, to check the compaction of base material at the areas and elevations tested, test results met the project requirements of 95% of the corrected maximum dry density and a moisture content of -2% to 3% from optimum, as determined in our laboratory using the State Proctor Method TEX-113-E.

Prior to departure, Vince Arriaga with V.K Knowlton was informed of the results of the day's testing and observations.

By Paul Anthony White 1800

Field Compaction Summary, D6938

Project No: 20:1910 Project Name: Stone Garden - Unit 2A Date: 9/3/2025

ECS Southwest, LLP

Client: Lennar

Contractor: Lennar

Technician: Paul Anthony White

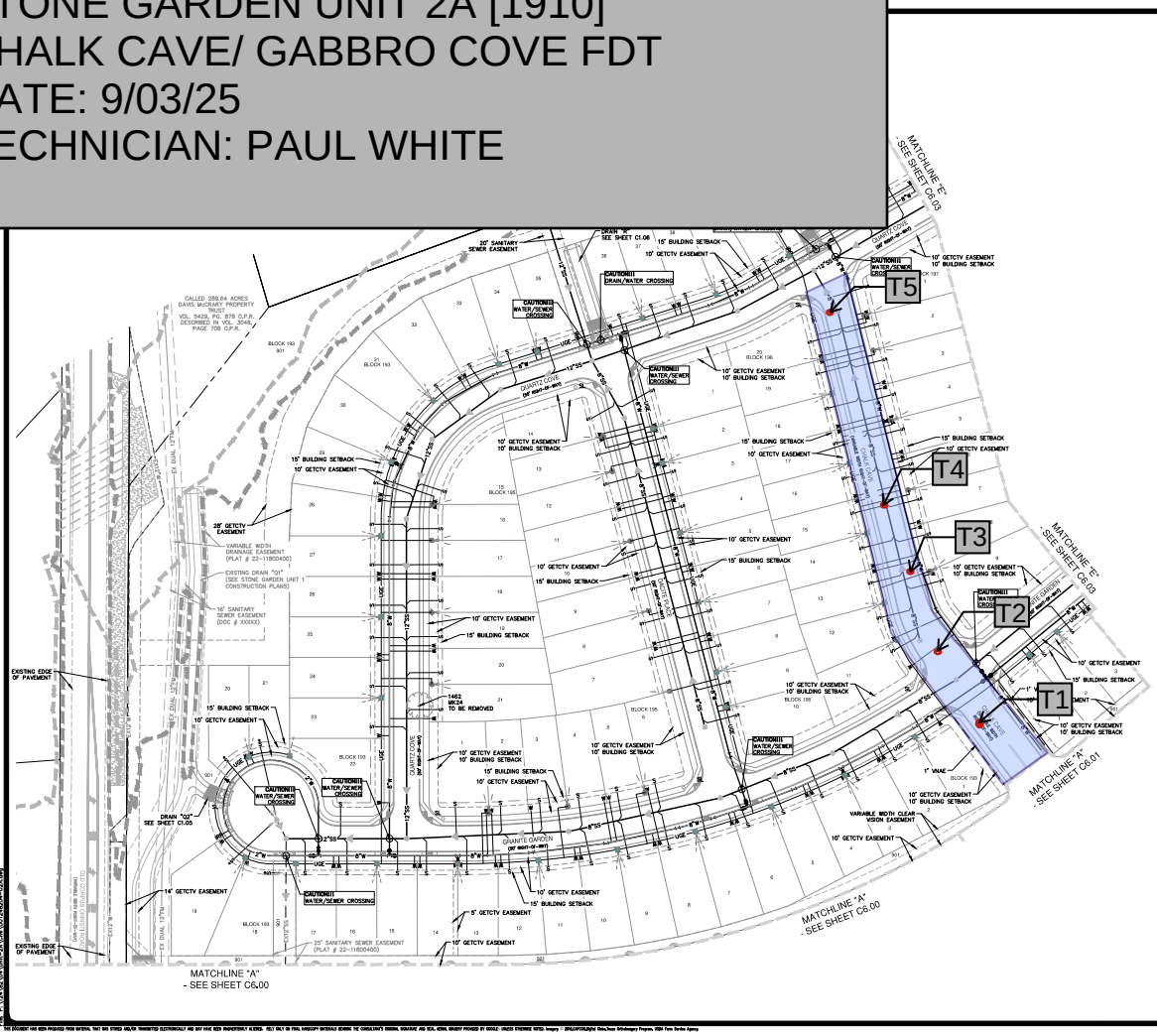
Test Method D6938			
Nuclear Gauge No. 26193			
Make	Troxler	Density Std	1479
Model	3430P	Moisture Std	659
Ser. No.	26193		

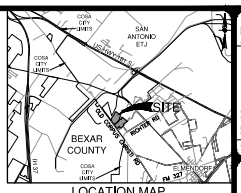
Sample No.	Description	Proctor Method	Uncorrected Max. Density	Uncorrected Optimum Moisture Content
D4S-12	**(GP-GC) POORLY GRADED GRAVEL WITH SILTY CLAY & SAND, Light Tan**	**TEX-113-E**	**137.7**	**4.5**

Test No.	Lot No.	Test Mode	Probe Depth (in.)	Station / Location	Lift / Elev	Sample No.	% Oversize	Corrected Max. Density	Corrected Optimum Moisture Content (%)	Wet Density (pcf)	Dry Density (pcf)	Moisture Content (%)	Percent Comp. (%)	P / F	Comments
1		DT	4	Chalk Cave, STA 6+50	Final lift	D4S-12	0.00	137.7	4.5	146.5	140.2	4.5	101.8	P	
2		DT	4	Chalk Cave, STA 5+50	Final Lift	D4S-12	0.00	137.7	4.5	150.4	141.6	6.2	102.8	P	
3		DT	4	Chalk Cave, STA 4+50	Final Lift	D4S-12	0.00	137.7	4.5	138.6	131.4	5.5	95.4	P	
4		DT	4	Chalk Cave, STA 3+50	Final Lift	D4S-12	0.00	137.7	4.5	143.4	136.3	5.3	99.0	P	
5		DT	4	Chalk Cave, STA 5+50	Final Lift	D4S-12	0.00	137.7	4.5	144.4	138.0	4.6	100.2	P	
6		DT	4	Gabbro Cove, STA 4+50	Final Lift	D4S-12	0.00	137.7	4.5	148.6	140.4	5.8	102.0	P	
7		DT	4	Gabbro Cove, STA 3+00	Final Lift	D4S-12	0.00	137.7	4.5	144.0	136.1	5.8	98.8	P	
8		DT	4	Gabbro Cove, STA 1+50	Final Lift	D4S-12	0.00	137.7	4.5	147.9	140.4	5.4	102.0	P	

Test Mode: DT = Direct Transmission BS = Back Scatter

STONE GARDEN UNIT 2A [1910]
CHALK CAVE/ GABBRO COVE FDT
DATE: 9/03/25
TECHNICIAN: PAUL WHITE





SCALE: 1" = 50' (0' 50' 100' 150')

UTILITY LEGEND

PROJECT LIMITS	
EXISTING WATER	W
EXISTING SEWER	SS
PROPOSED SEWER	SS (MANHOLE)
PROPOSED WATER	W (FIRE HYDRANT)
PROPOSED WVE & LATERAL	WV
PROPOSED SEWER LATERAL TO TIE INTO EXISTING SEWER LINE	ST-1
SINGLE WATER SERVICE	W
STREET LIGHTS	SL
GAS, ELECTRIC, TELEPHONE & CABLE TELEVISION EASEMENT	GETCTV
SECONDARY PEDESTAL	
TRANSFORMER	
PULL BOX	PB
TREES TO REMAIN	
VEHICULAR NON ACCESS EASEMENT	VNAE

CONDUIT NOTES:

1. CONTRACTOR SHALL INSTALL PERMANENT MARKERS IN PROPOSED CURB WHERE CONDUITS CROSS THE ROADWAY (BOTH SIDES).
2. CONDUITS SHALL BE PVC WITH MINIMUM BURY OF 36 INCHES BELOW PROPOSED FINISHED GRADE. SCHEDULE 80 TO BE USED FOR CPS CONDUITS. ALL OTHER CONDUITS ARE SCHEDULE 40.
3. ALL CONDUITS SHALL BE EXTENDED BEHIND CURBS OR PROPOSED SIDEWALKS A MINIMUM OF 3 FEET AND CAPPED FOR FUTURE USE.
4. ALL CONDUIT SLEEVES TO BE USED FOR ELECTRIC, GAS, OR TELECOMMUNICATION UTILITY CROSSINGS SHALL BE INSTALLED TO MEET OR EXCEED DESIGN REQUIREMENTS FOR THE UTILITY AGENCY WHICH THEY SERVE REGARDING DEPTH OF BURY, SIZE, MATERIAL, METHOD OF TRENCH PLACEMENT, AND PROXIMITY TO OTHER UTILITIES. THE CONTRACTOR IS SOLELY RESPONSIBLE FOR VERIFYING AND INSTALLING THE CONDUIT SLEEVES TO MEET THESE SPECIFICATIONS INCLUDING COORDINATING WITH THE UTILITY AGENCY FOR ANY REQUIRED INSPECTIONS

TRENCH EXCAVATION SAFETY PROTECTION:

CONTRACTOR AND/ OR CONTRACTOR'S INDEPENDENTLY RETAINED EMPLOYEE OR STRUCTURAL DESIGN/ GEOTECHNICAL/ SAFETY/EQUIPMENT CONSULTANT, IF ANY, SHALL REVIEW THESE PLANS AND ANY AVAILABLE GEOTECHNICAL INFORMATION AND THE ANTICIPATED INSTALLATION SITES WITHIN THE PROJECT WORK AREA IN ORDER TO IMPLEMENT CONTRACTOR'S TRENCH EXCAVATION SAFETY PROTECTION SYSTEMS, PROGRAMS AND /OR PROCEDURES FOR THE PROJECT DESCRIBED IN THE CONTRACT DOCUMENTS. THE CONTRACTOR'S IMPLEMENTATION OF THESE SYSTEMS, PROGRAMS AND/OR PROCEDURES SHALL PROVIDE FOR TRENCH EXCAVATION SAFETY PROTECTION THAT COMPLY WITH, AS A MINIMUM, OSHA STANDARDS FOR TRENCH EXCAVATIONS. SPECIFICALLY, CONTRACTOR AND/OR CONTRACTOR'S INDEPENDENTLY RETAINED EMPLOYEE OR SAFETY CONSULTANT SHALL IMPLEMENT A TRENCH SAFETY PROGRAM IN ACCORDANCE WITH OSHA STANDARDS GOVERNING THE PRESENCE AND ACTIVITIES OF INDIVIDUALS WORKING IN AND AROUND TRENCH EXCAVATION.

CAUTION!!

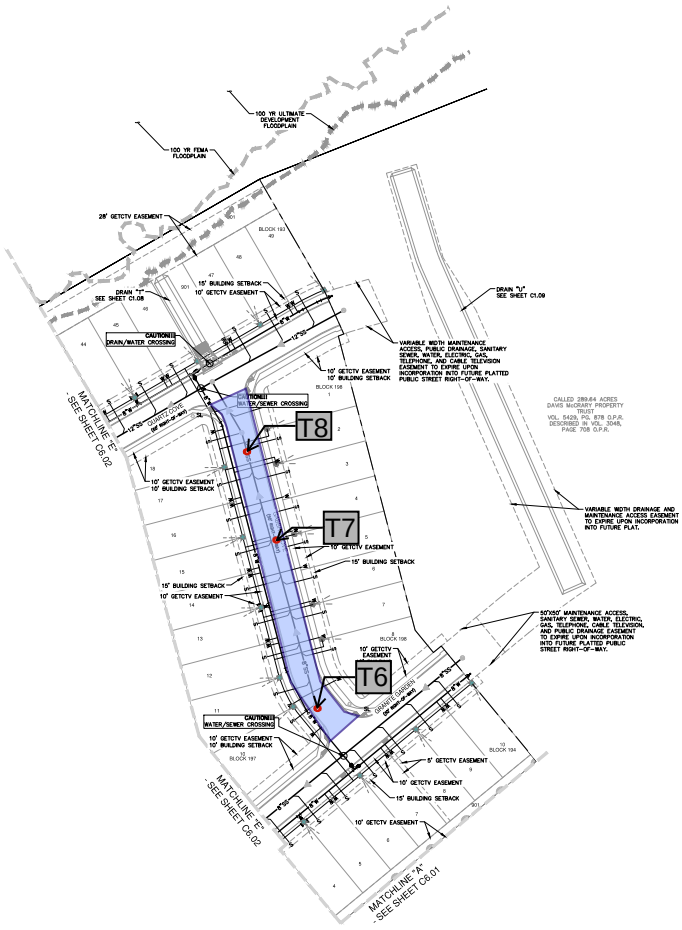
CONTRACTOR SHALL BE REQUIRED TO LOCATE ALL PUBLIC OR PRIVATE UTILITIES INCLUDING BUT NOT LIMITING TO, WATER, SEWER, TELEPHONE AND FIBER OPTIC LINES, SITE LIGHTING ELECTRIC, SECONDARY ELECTRIC, PRIMARY ELECTRIC, GAS, TELEVISION CABLE, AND ANY OTHER UTILITIES. THE LOCATION OF ANY UTILITY CONFLICTS THAT ARISE SHOULD BE COMMUNICATED TO THE ENGINEER IMMEDIATELY AND PRIOR TO CONSTRUCTION. THE CONTRACTOR SHALL CONTACT 1-800-DIG-TESS A MINIMUM OF 48 HOURS PRIOR TO THE START OF CONSTRUCTION. ANY DAMAGE TO EXISTING UTILITIES SHALL BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR AND THE REPAIR SHALL BE AT CONTRACTOR'S SOLE EXPENSE WHETHER THE UTILITY IS SHOWN ON THESE PLANS OR NOT.

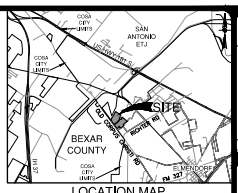
NO.	REVISION	DATE

PAPE-DAWSON ENGINEERS
SAN ANTONIO | AUSTIN | HOUSTON | FORT WORTH | DALLAS
2000 NW LOOP 410 | SAN ANTONIO, TX 78213 | 210.375.9000
TBPE FIRM REGISTRATION #470 | TBPLS FIRM REGISTRATION #100288-00

STONE GARDEN - UNIT 2A
BEXAR COUNTY, TEXAS
OVERALL UTILITY PLAN

PLAT NO. 22-11800734
JOB NO. 12482-04
DATE AUGUST 2023
DESIGNER JD
CHECKED DW DRAWN TC
SHEET C6.02





LOCATION MAP
NOT-TO-SCALE

SCALE: 1" = 50'
0' 50' 100' 150'

UTILITY LEGEND

PROJECT LIMITS	
EXISTING WATER	W
EXISTING SEWER	SS
PROPOSED SEWER	SS, MANHOLE
PROPOSED WATER	W, FIRE HYDRANT
PROPOSED WYE & LATERAL	WYE
PROPOSED SEWER LATERAL TO TIE INTO EXISTING SEWER LINE	STUB
SINGLE WATER SERVICE	SE
STREET LIGHTS	SL
GAS, ELECTRIC, TELEPHONE & CABLE TELEVISION EASEMENT	GETCTV
SECONDARY PEDESTAL	
TRANSFORMER	
PULL BOX	PB
TREES TO REMAIN	
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NO.	REVISION	DATE

EUGENE H. DAWSON III
112782
REGISTERED PROFESSIONAL ENGINEER
11/9/23

PAPE-DAWSON ENGINEERS
SAN ANTONIO | AUSTIN | HOUSTON | FORT WORTH | DALLAS
2000 NW LOOP 410 | SAN ANTONIO, TX 78213 | 210.375.9000
TBPE FIRM REGISTRATION #470 | TBPLS SURVEYING FIRM #100288-00

STONE GARDEN - UNIT 2A
BEXAR COUNTY, TEXAS
OVERALL UTILITY PLAN

PLAT NO. 22-11800734
JOB NO. 12462-04
DATE AUGUST 2023
DESIGNER JD
CHECKED DW DRAWN TC
SHEET C6.03

Attachments

Chalk Cave Station 650

Figure 1

Chalk Cave Stations 550-150

Figure 2

Attachments

Gabbro Cove Stations 450-150

Figure 3

TX Registered Firm # F-8461

ECS Southwest, LLP
431 Isom Road, Suite 114
San Antonio, TX 78216
T 210.528.1430
F 214.483.9684

LETTER OF TRANSMITTAL

September 04, 2025
Lennar
100 NE Loop 410 Suite 1155
San Antonio, TX 78216

ATTN: Mr. Nathan Nowell

RE: **Stone Garden - Unit 2A**
ECS Job # **20:1910**

Permits:
Location: **14395 Old Corpus Christi Road**
Elmendorf, TX 78112

X	Field Reports	**X**	For your use	**X**	As requested

CC: City of San Antonio - Development Services Department - Juan Ramirez
Lennar - Rogelio "Roy" Olivarez, Jr.
V.K. Knowlton Construction - Sammy Ramos

ENCL:

Laboratory testing services have been completed for the following sample obtained by ECS on 08/25/2025, 08/26/2025 and 08/27/2025(reference reports 20:1952-84, 20:1952-85 and 20:1952-86).

On-site Lime-Stabilized Material:

ID: D4S-15:for Azzurro Stone STA 11+00- Atterberg Limits (SP), Sieve Analysis, and Standard Proctor

ID: D4S-16:for Azzurro Stone STA 5+00 - Atterberg Limits (SP), Sieve Analysis, and Standard Proctor

ID: D4S-17:for Bassalts Garden STA 1+00- Atterberg Limits (SP), Sieve Analysis, and Standard Proctor

ID: D4S-18:for Hornblende Trails- Atterberg Limits (SP), Sieve Analysis, and Standard Proctor

ID: D4S-19:for Giallo Place- Atterberg Limits (SP), Sieve Analysis, and Standard Proctor

ID: D4S-20:for Fiore Garden- Atterberg Limits (SP), Sieve Analysis, and Standard Proctor

ID: D4S-21:for Chalk Cave STA 10+50- Atterberg Limits (SP), Sieve Analysis, and Standard Proctor

ID: D4S-22:for Mudstone Place STA 9+50- Atterberg Limits (SP), Sieve Analysis, and Standard Proctor

Results:
Material meets criteria for Lime-Stabilized for: type, gradation and plasticity.

TX Registered Firm # F-8461

ECS Southwest, LLP
431 Isom Road, Suite 114
San Antonio, TX 78216
T 210.528.1430
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LETTER OF TRANSMITTAL

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X	Field Reports	**X**	For your use	**X**	As requested

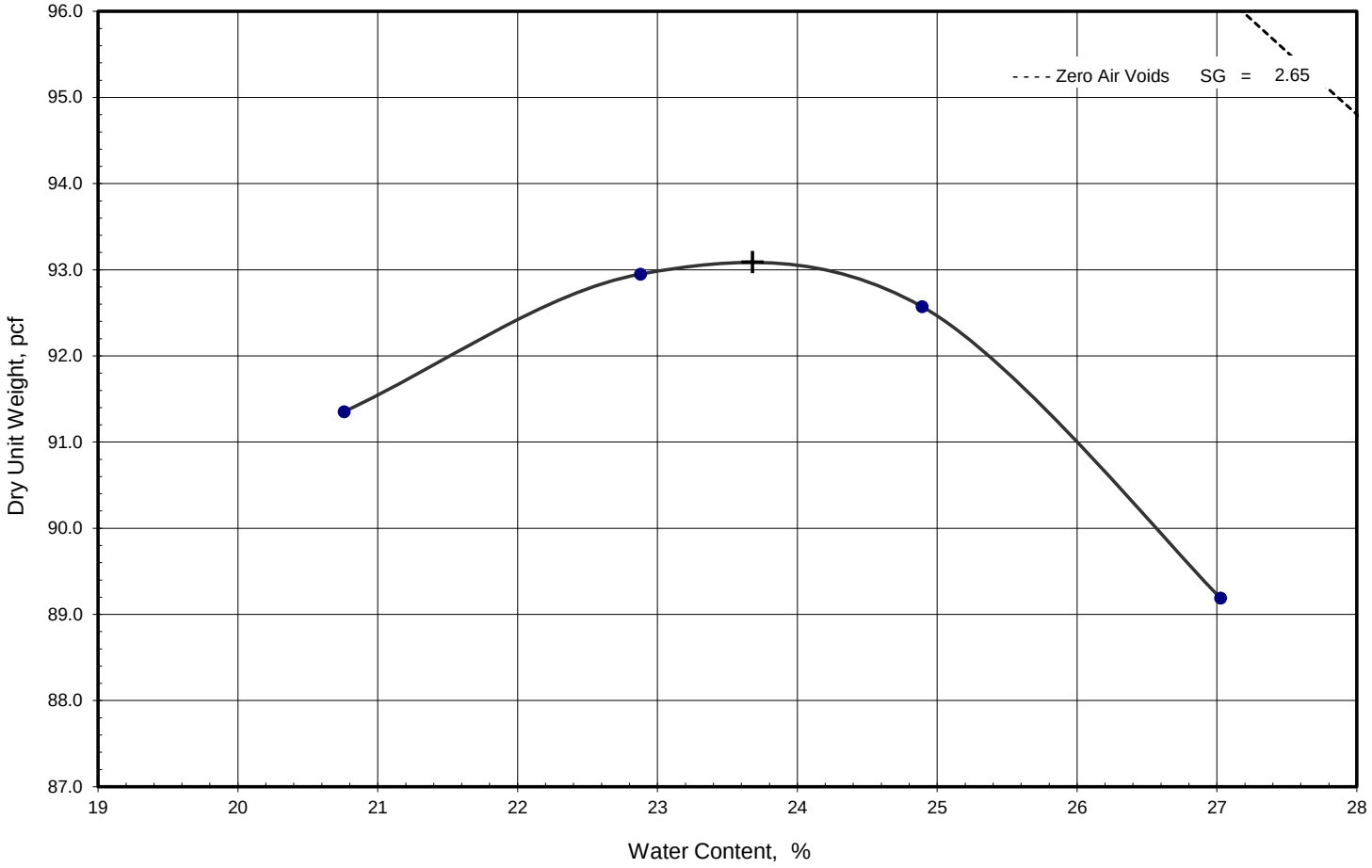
Adam James Heiman, P.E.
Assistant Office Manager

Stephanie Marie Chavez
CMT Project Professional I

Disclaimer

1. This report (and any attachments) shall not be reproduced except in full without prior written approval of ECS.
2. The information in this report relates only to the activities performed on the report date.
3. Where appropriate, this report includes statements as to compliance with applicable project drawings, and specifications for the activities, performed on this report date.
4. Incomplete or non-conforming work will be reported for future resolution.
5. The results of samples and/or specimens obtained or prepared for subsequent laboratory testing will be presented in separate reports/documents.

Laboratory Compaction Characteristics of Soil Using Standard Effort



Optimum Moisture Content	**23.7**	%	Preparation	ASTM moist preparation
Maximum Dry Unit Weight	**93.1**	pcf	Type of rammer	Mechanical - circular face
			Test Specfication / Method	ASTM D698-12e2-method A

Soil Description	Nat. Moist. %	Liquid Limit	Plasticity Index	%< #200	USCS	AASHTO
(SM) SILTY SAND, Light Reddish Brown	12.4	31	5	47.3	SM	A-4

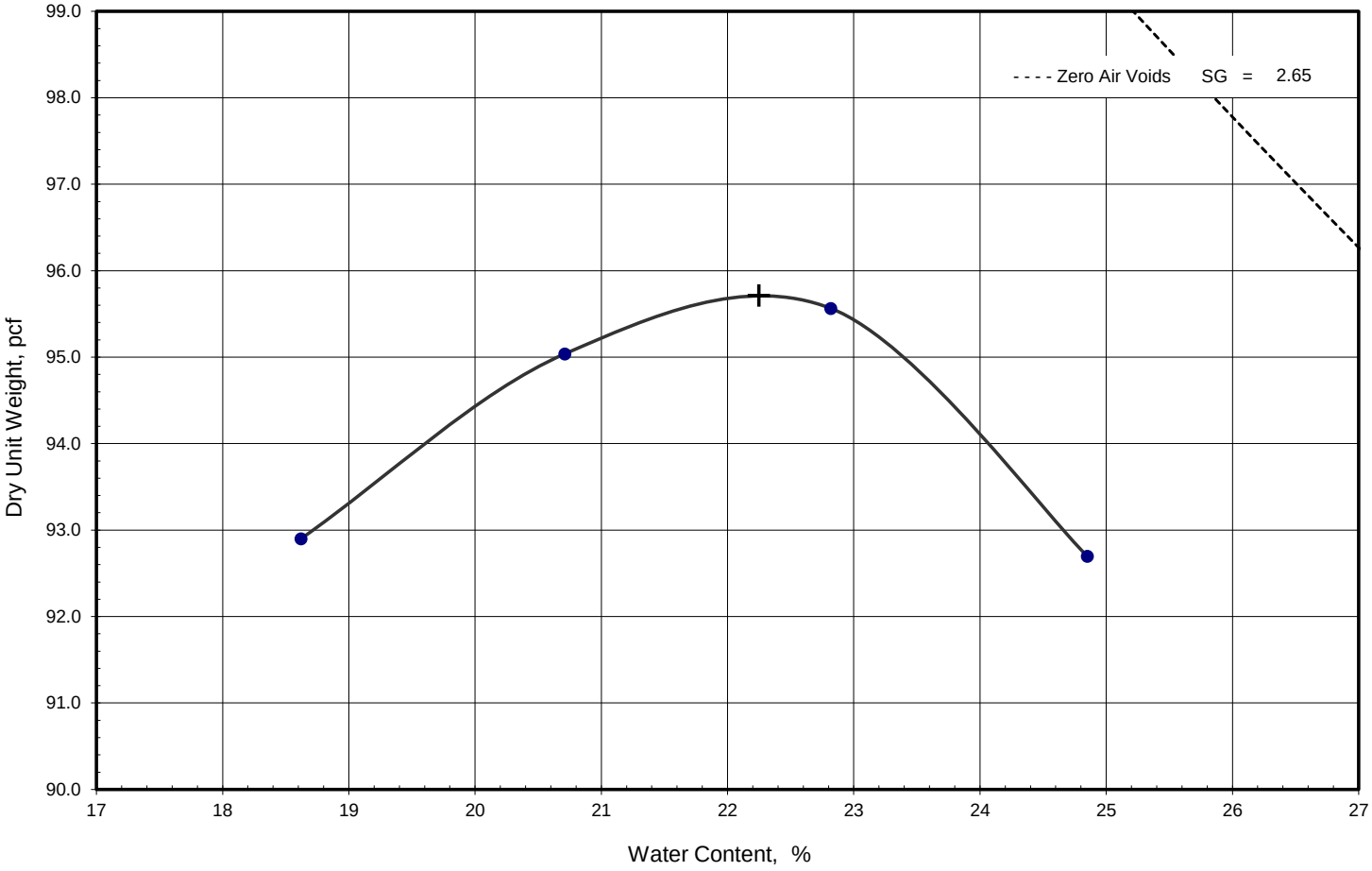
Project: Stone Garden - Unit 2A
Client: Lennar
Sample / Source: On-site Lime stabilized material at Azzurro Stone STA 11+00

Project No.: 20:1910
Depth (ft.): 0 - 1
Sample No.: D4S-15
Date Reported: 9/3/2025

Office / Lab	Address	Office Number / Fax
ECS Southwest LLP - San Antonio	431 Isom Road Suite 114 San Antonio, TX 78216	(210)528-1430 (214)483-9684

Tested by	Checked by	Approved by	Date Received	Remarks
fzuniga	fzuniga	fzuniga		

Laboratory Compaction Characteristics of Soil
Using Standard Effort



Optimum Moisture Content	**22.2**	%	Preparation	ASTM moist preparation
Maximum Dry Unit Weight	**95.7**	pcf	Type of rammer	Mechanical - circular face
			Test Specfication / Method	ASTM D698-12e2-method A

Soil Description	Nat. Moist. %	Liquid Limit	Plasticity Index	%< #200	USCS	AASHTO
(SM) SILTY SAND, Light Reddish Brown	12.1	NP	NP	36.6		A-4

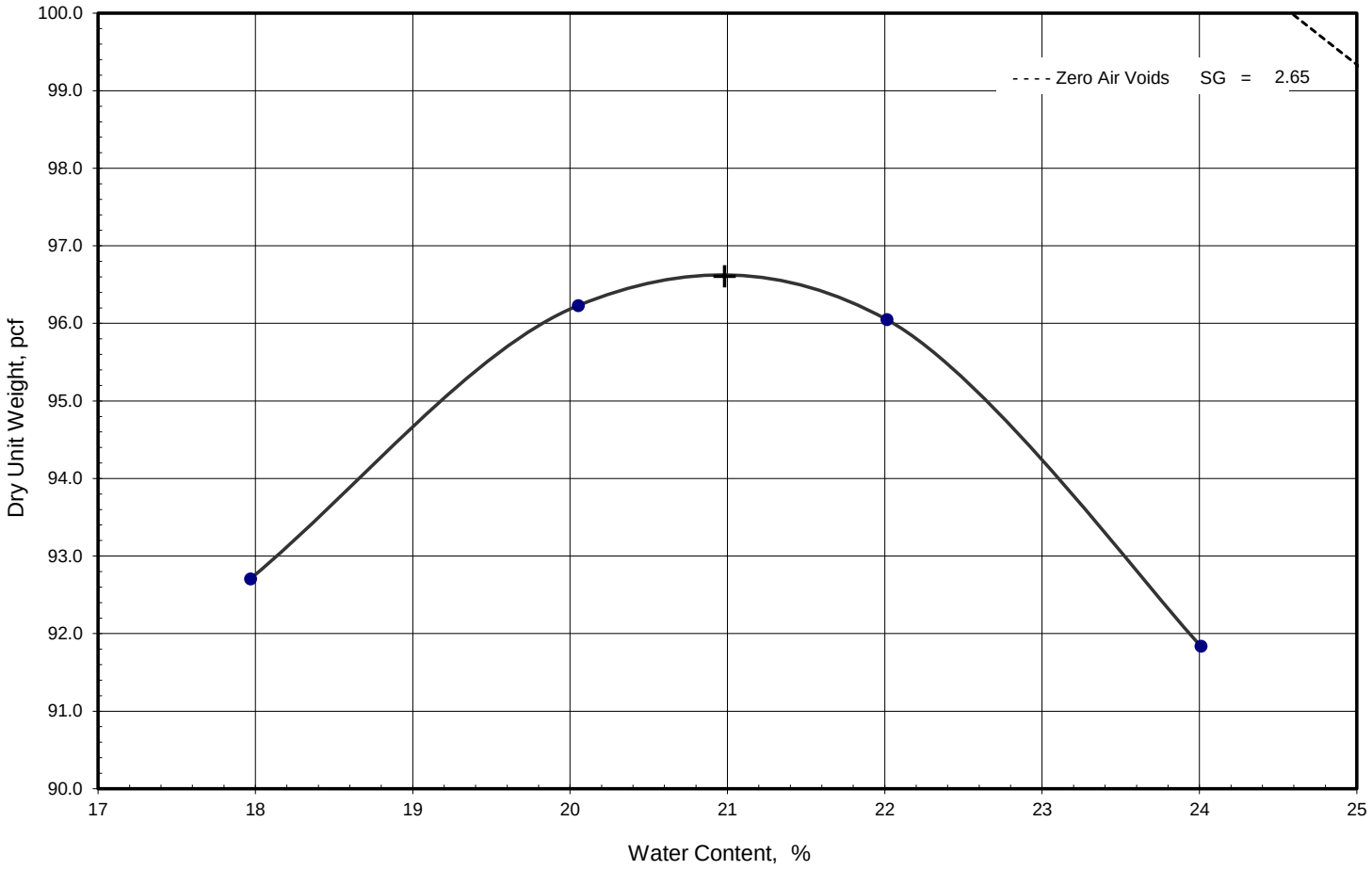
Project: Stone Garden - Unit 2A
Client: Lennar
Sample / Source: On-site Lime stabilized material at Azzurro Stone STA 5+00

Project No.: 20:1910
Depth (ft.): 0 - 1
Sample No.: D4S-16
Date Reported: 9/3/2025

Office / Lab	Address	Office Number / Fax
ECS Southwest LLP - San Antonio	431 Isom Road Suite 114 San Antonio, TX 78216	(210)528-1430 (214)483-9684

Tested by	Checked by	Approved by	Date Received	Remarks
fzuniga	fzuniga	fzuniga		

Laboratory Compaction Characteristics of Soil Using Standard Effort



Optimum Moisture Content	**21.0**	%	Preparation	ASTM moist preparation
Maximum Dry Unit Weight	**96.6**	pcf	Type of rammer	Mechanical - circular face
			Test Specfication / Method	ASTM D698-12e2-method A

Soil Description	Nat. Moist. %	Liquid Limit	Plasticity Index	%< #200	USCS	AASHTO
(ML) SANDY SILT, Light Reddish Brown	10.6	32	4	51.2	ML	A-4

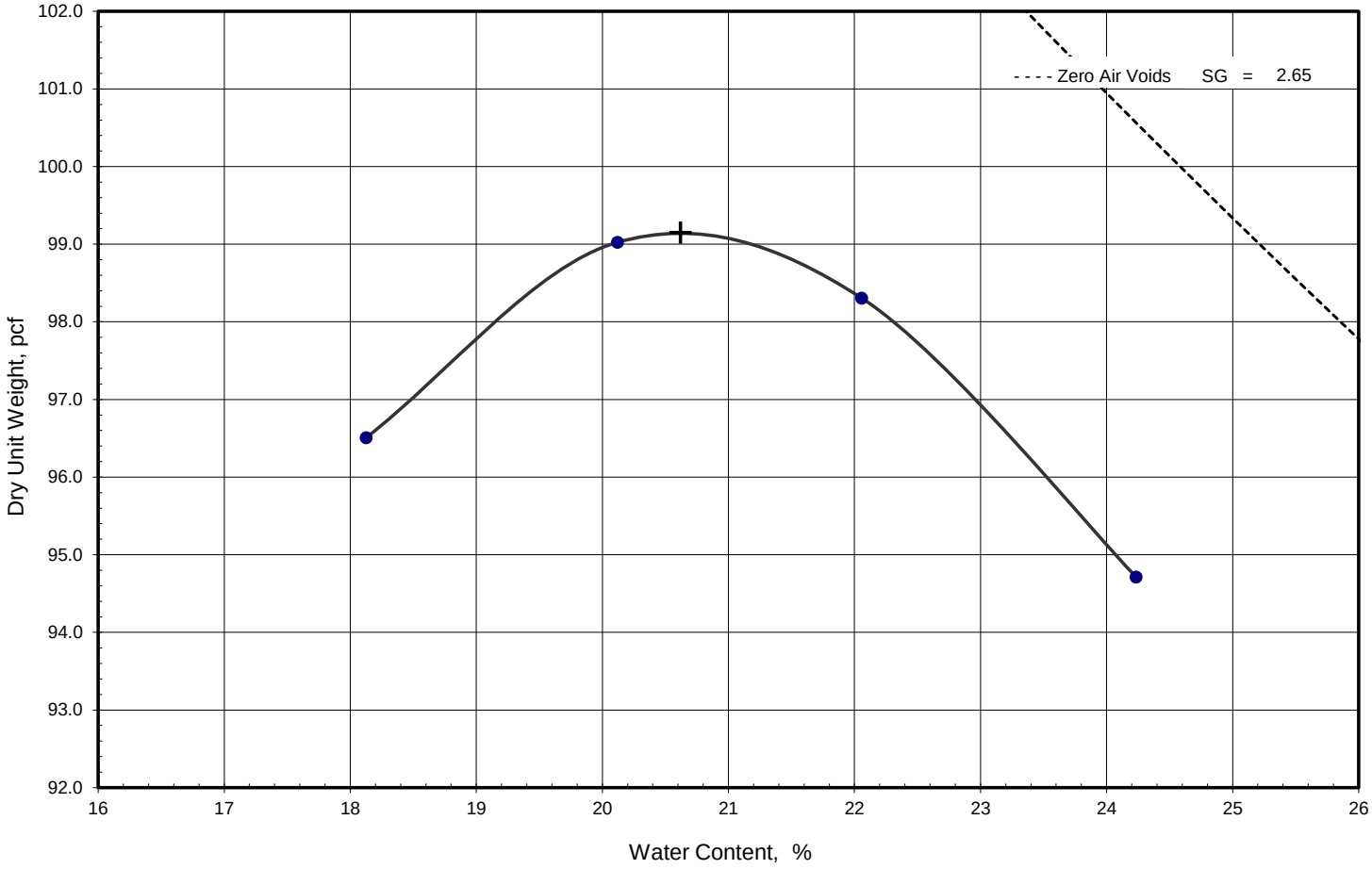
Project: Stone Garden - Unit 2A
Client: Lennar
Sample / Source: On-site Lime stabilized material at Bassalts Garden STA 1+00

Project No.: 20:1910
Depth (ft.): 0 - 1
Sample No.: D4S-17
Date Reported: 9/3/2025

Office / Lab	Address	Office Number / Fax
ECS Southwest LLP - San Antonio	431 Isom Road Suite 114 San Antonio, TX 78216	(210)528-1430 (214)483-9684

Tested by	Checked by	Approved by	Date Received	Remarks
fzuniga	fzuniga	fzuniga		

Laboratory Compaction Characteristics of Soil Using Standard Effort



Optimum Moisture Content	**20.6**	%	Preparation	ASTM moist preparation
Maximum Dry Unit Weight	**99.2**	pcf	Type of rammer	Mechanical - circular face
			Test Specfication / Method	ASTM D698-12e2-method A

Soil Description	Nat. Moist. %	Liquid Limit	Plasticity Index	%< #200	USCS	AASHTO
(SM) SILTY SAND, Light Reddish Brown	13.7	NP	NP	34.7		A-2-4

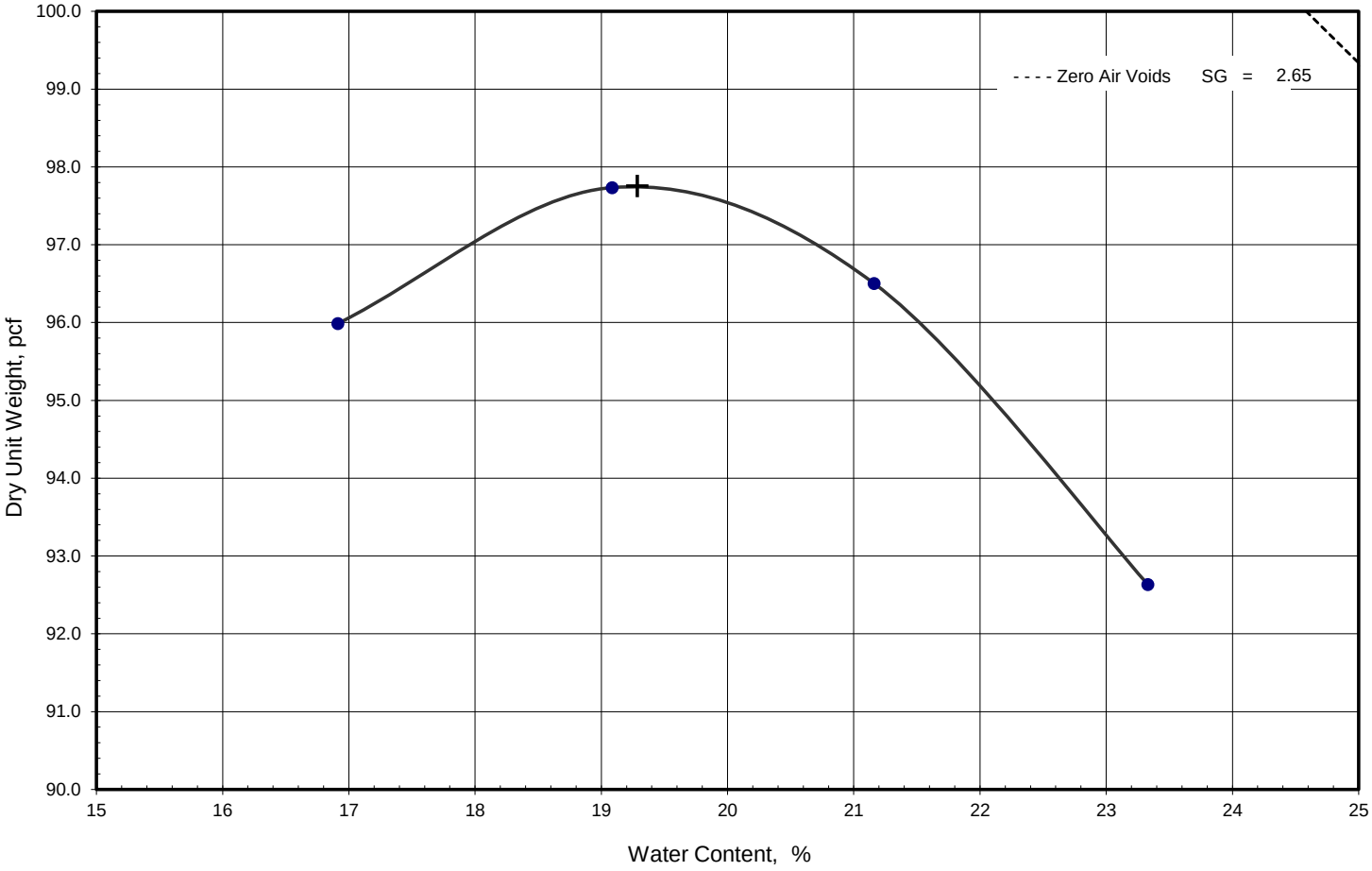
Project: Stone Garden - Unit 2A
Client: Lennar
Sample / Source: On-site Lime stabilized material at Hornblende Trails

Project No.: 20:1910
Depth (ft.): 0 - 1
Sample No.: D4S-18
Date Reported: 9/3/2025

Office / Lab	Address	Office Number / Fax
ECS Southwest LLP - San Antonio	431 Isom Road Suite 114 San Antonio, TX 78216	(210)528-1430 (214)483-9684

Tested by	Checked by	Approved by	Date Received	Remarks
fzuniga	fzuniga	fzuniga		

Laboratory Compaction Characteristics of Soil Using Standard Effort



Optimum Moisture Content	**19.3**	%	Preparation	ASTM moist preparation
Maximum Dry Unit Weight	**97.8**	pcf	Type of rammer	Mechanical - circular face
			Test Specfication / Method	ASTM D698-12e2-method A

Soil Description	Nat. Moist. %	Liquid Limit	Plasticity Index	%< #200	USCS	AASHTO
(SM) SILTY SAND, Light Reddish Brown	12.8	NP	NP	27.6		A-2-4

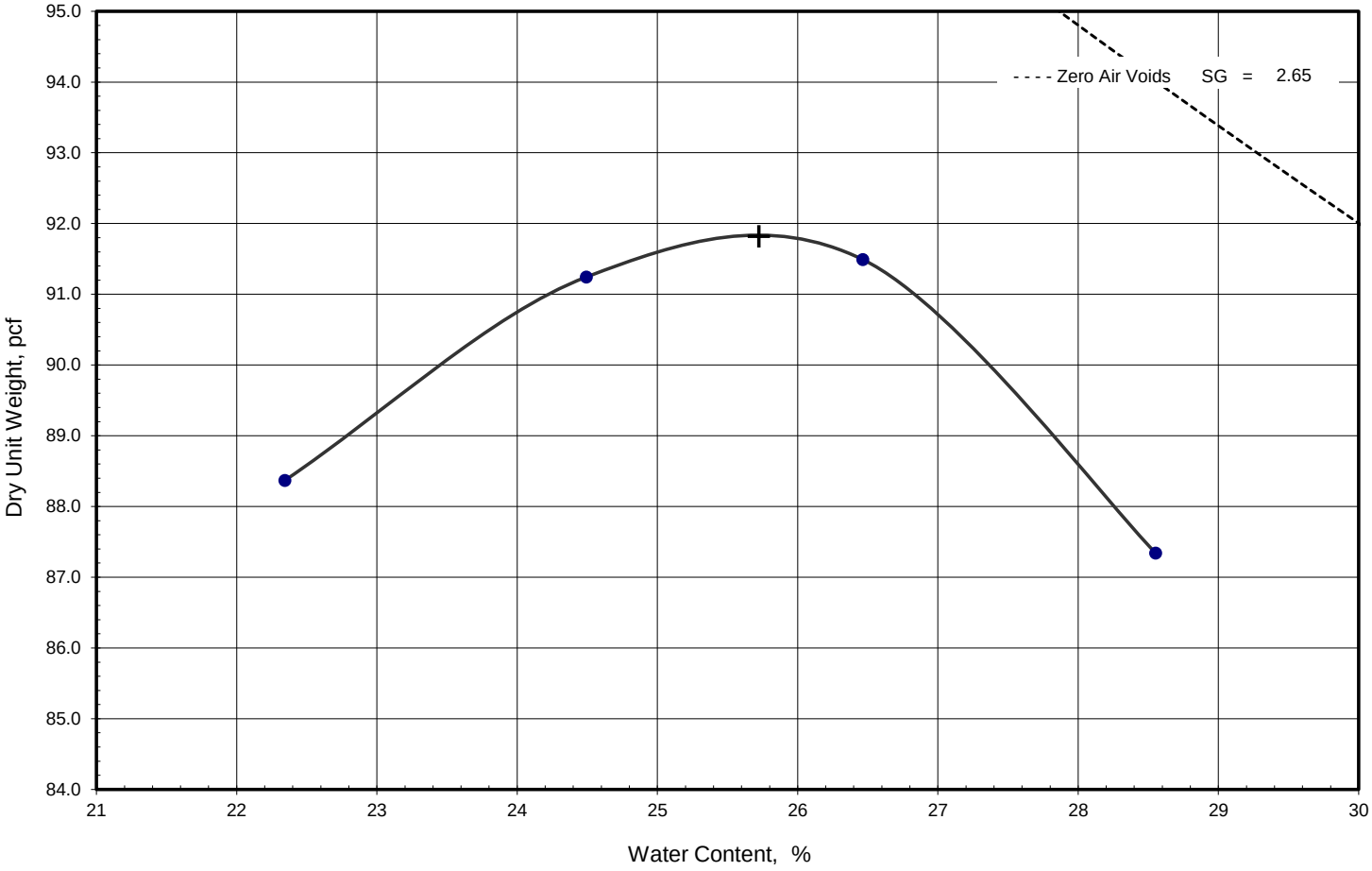
Project: Stone Garden - Unit 2A
Client: Lennar
Sample / Source: On-site Lime stabilized material at Giallo Place

Project No.: 20:1910
Depth (ft.): 0 - 1
Sample No.: D4S-19
Date Reported: 9/3/2025

Office / Lab	Address	Office Number / Fax
ECS Southwest LLP - San Antonio	431 Isom Road Suite 114 San Antonio, TX 78216	(210)528-1430 (214)483-9684

Tested by	Checked by	Approved by	Date Received	Remarks
fzuniga	fzuniga	fzuniga		

Laboratory Compaction Characteristics of Soil Using Standard Effort



Optimum Moisture Content	**25.7**	%	Preparation	ASTM moist preparation
Maximum Dry Unit Weight	**91.8**	pcf	Type of rammer	Mechanical - circular face
			Test Specfication / Method	ASTM D698-12e2-method A

Soil Description	Nat. Moist. %	Liquid Limit	Plasticity Index	%< #200	USCS	AASHTO
(SM) SILTY SAND, Light Reddish Brown	17.0	NP	NP	25.5		A-2-4

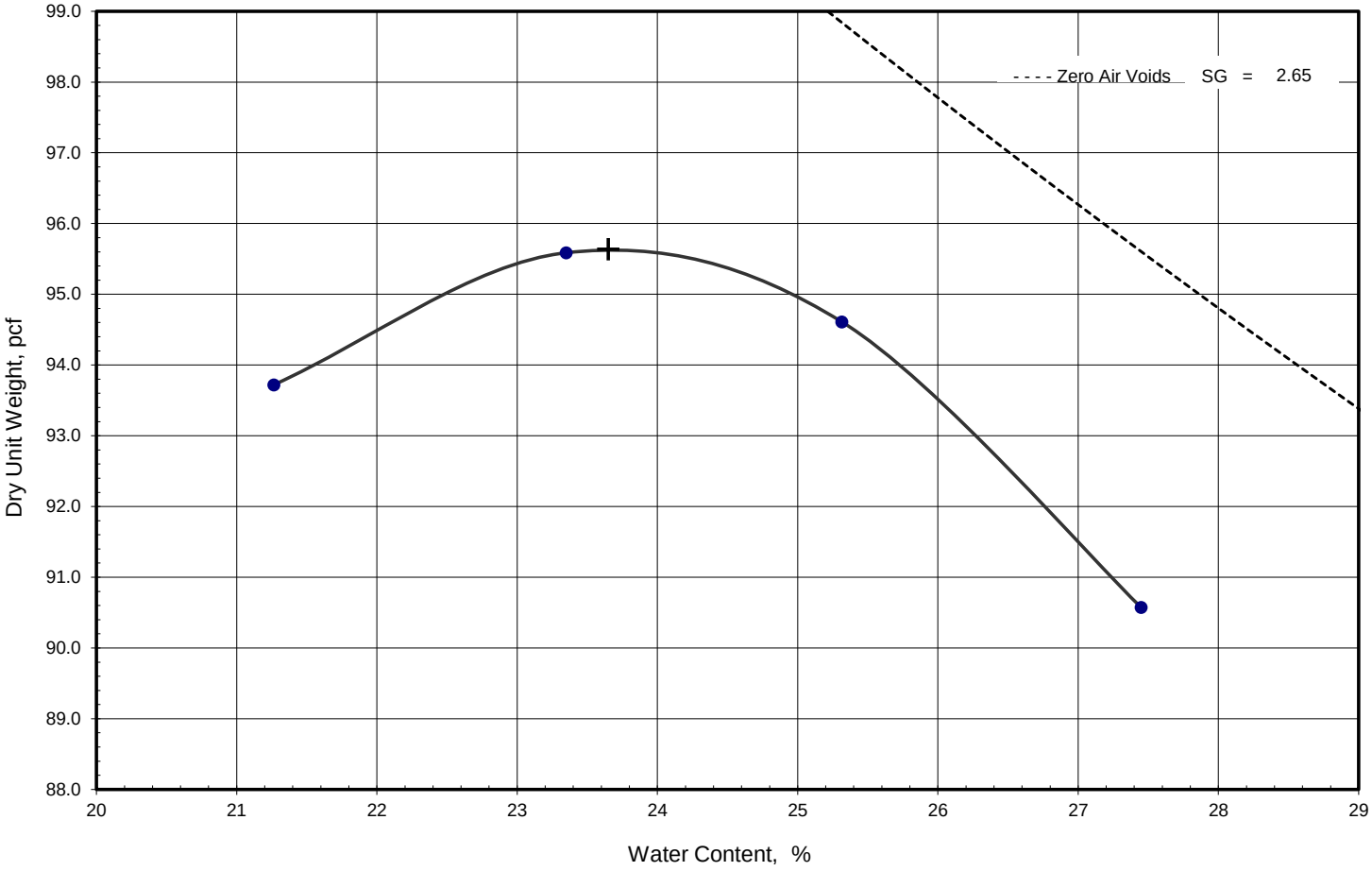
Project: Stone Garden - Unit 2A
Client: Lennar
Sample / Source: On-site Lime stabilized material at Fiore Garden

Project No.: 20:1910
Depth (ft.): 0 - 1
Sample No.: D4S-20
Date Reported: 9/3/2025

Office / Lab	Address	Office Number / Fax
ECS Southwest LLP - San Antonio	431 Isom Road Suite 114 San Antonio, TX 78216	(210)528-1430 (214)483-9684

Tested by	Checked by	Approved by	Date Received	Remarks
fzuniga	fzuniga	fzuniga		

Laboratory Compaction Characteristics of Soil
Using Standard Effort



Optimum Moisture Content	**23.6**	%	Preparation	ASTM moist preparation
Maximum Dry Unit Weight	**95.6**	pcf	Type of rammer	Mechanical - circular face
			Test Specfication / Method	ASTM D698-12e2-method A

Soil Description	Nat. Moist. %	Liquid Limit	Plasticity Index	%< #200	USCS	AASHTO
(SM) SILTY SAND, Light Reddish Brown	16.3	NP	NP	11.6		A-1

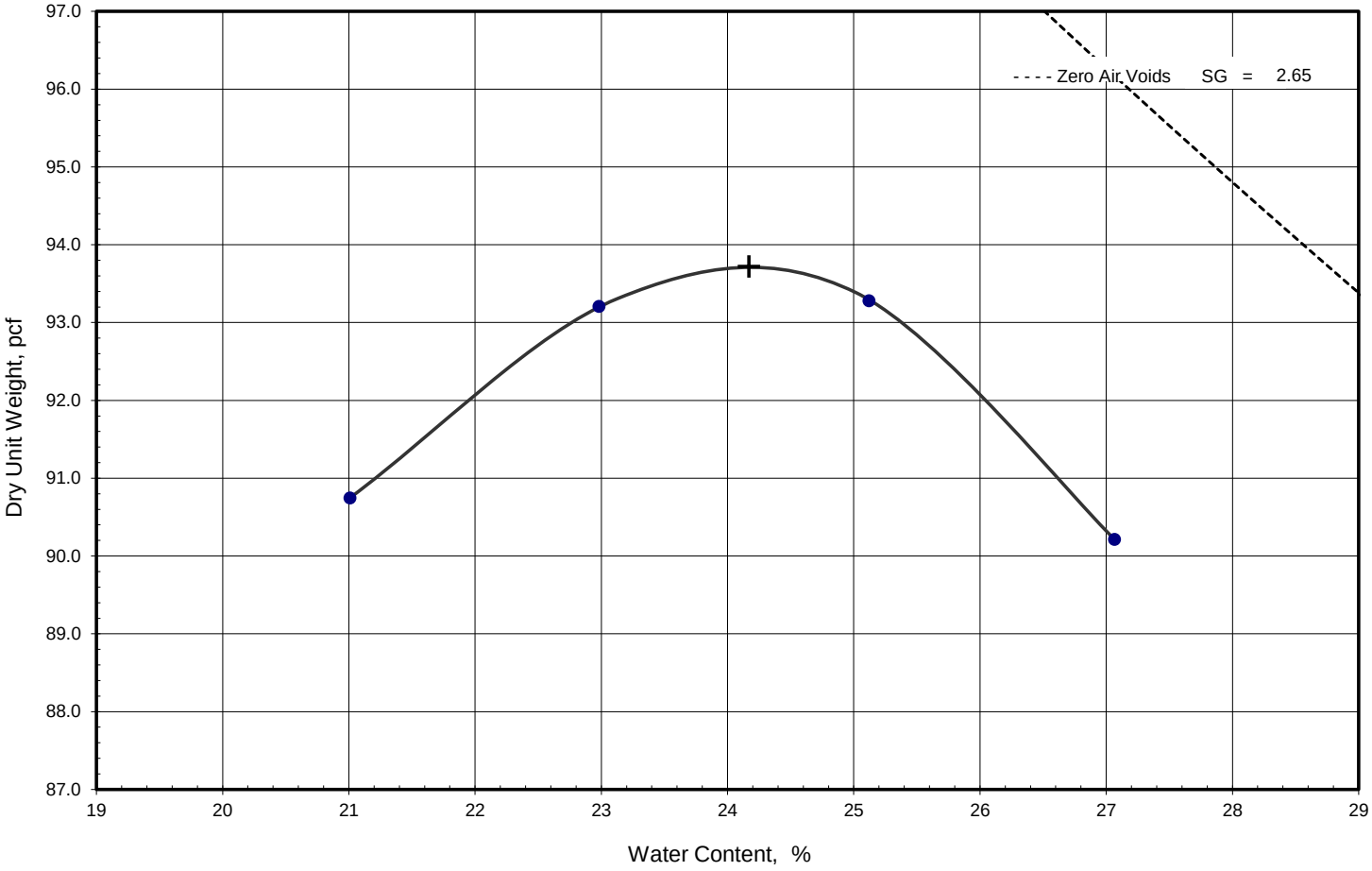
Project: Stone Garden - Unit 2A
Client: Lennar
Sample / Source: On-site Lime stabilized material at Chalk Cave STA 10+50

Project No.: 20:1910
Depth (ft.): 0 - 1
Sample No.: D4S-21
Date Reported: 9/3/2025

Office / Lab	Address	Office Number / Fax
ECS Southwest LLP - San Antonio	431 Isom Road Suite 114 San Antonio, TX 78216	(210)528-1430 (214)483-9684

Tested by	Checked by	Approved by	Date Received	Remarks
fzuniga	fzuniga	fzuniga		

Laboratory Compaction Characteristics of Soil Using Standard Effort



Optimum Moisture Content	**24.2**	%	Preparation	ASTM moist preparation
Maximum Dry Unit Weight	**93.7**	pcf	Type of rammer	Mechanical - circular face
			Test Specfication / Method	ASTM D698-12e2-method A

Soil Description	Nat. Moist. %	Liquid Limit	Plasticity Index	%< #200	USCS	AASHTO
(SM) SILTY SAND, Light Reddish Brown	12.4	NP	NP	18.0		A-2-4

Project: Stone Garden - Unit 2A
Client: Lennar
Sample / Source: On-site Lime stabilized material at Mudstone Place STA 9+50

Project No.: 20:1910
Depth (ft.): 0 - 1
Sample No.: D4S-22
Date Reported: 9/3/2025

Office / Lab	Address	Office Number / Fax
ECS Southwest LLP - San Antonio	431 Isom Road Suite 114 San Antonio, TX 78216	(210)528-1430 (214)483-9684

Tested by	Checked by	Approved by	Date Received	Remarks
fzuniga	fzuniga	fzuniga		

TX Registered Firm # F-8461

ECS Southwest, LLP
431 Isom Road, Suite 114
San Antonio, TX 78216
T 210.528.1430
F 214.483.9684

LETTER OF TRANSMITTAL

September 04, 2025
Lennar
100 NE Loop 410 Suite 1155
San Antonio, TX 78216

ATTN: Mr. Nathan Nowell

RE: **Stone Garden - Unit 2A**
ECS Job # **20:1910**

Permits:
Location: **14395 Old Corpus Christi Road**
Elmendorf, TX 78112

X Field Reports **X** For your use **X** As requested

CC: City of San Antonio - Development Services Department - Juan Ramirez
Lennar - Rogelio "Roy" Olivarez, Jr.
V.K. Knowlton Construction - Sammy Ramos

ENCL: Field Report # 89 9/4/2025 Soil Density Testing

Adam James Heiman, P.E.
Assistant Office Manager

Stephanie Marie Chavez
CMT Project Professional I

Disclaimer

1. This report (and any attachments) shall not be reproduced except in full without prior written approval of ECS.
2. The information in this report relates only to the activities performed on the report date.
3. Where appropriate, this report includes statements as to compliance with applicable project drawings, and specifications for the activities, performed on this report date.
4. Incomplete or non-conforming work will be reported for future resolution.
5. The results of samples and/or specimens obtained or prepared for subsequent laboratory testing will be presented in separate reports/documents.

TX Registered Engineering Firm # F-8461

ECS Southwest, LLP
431 Isom Road, Suite 114
San Antonio, TX 78216
T 210.528.1430
F 214.483.9684

FIELD REPORT

Project	**Stone Garden - Unit 2A**
Location	**Elmendorf, TX**
Client	**Lennar**
Contractor	**Lennar**

Project No.	**20:1910**
Report No.	**89**
Day & Date	**Thursday 9/4/2025**
Weather	**85 °/ Sunny**
On-Site Time	**3.75**
Lab Time	**0.75**
Travel Time*	**0.50**
Total	**5.00**
Re Obs Time	**0.00**

Remarks **Soil Density Testing**

Trip Charges*	Tolls/Parking*	Mileage*	Time of	Arrival	Departure
35.00				**9:00A**	**12:45P**
Chargeable Items **5000**					

* Travel time and mileage will be billed in accordance with the contract.

Summary of Services Performed (field test data, locations, elevations & depths are estimates) & Individuals Contacted.

The undersigned arrived on-site, as requested to observe the placement and compaction of Lime stabilized Material.

Location:
Mudstone Trail, Subgrade
Basalt Garden, Subgrade
Azzuro Stone, Subgrade
Hornblende Trails, Subgrade

Please see the attached sketch.

Civil plan page C7.00 Dated 11/14/23 and the Geotechnical Report dated 4/25/22 were reviewed prior to testing.

Utilizing Nuclear Method ASTM D 6938, to check the compaction of subgrade at the areas and elevations tested, test results met the project requirements of 95% of the corrected maximum dry density and a moisture content of -3% to 3% from optimum as approved by City Inspector and determined in our laboratory using the Standard Proctor Method ASTM D698.

Prior to departure, Sammy Ramos and Pablo with V.K Knowlton was informed of the results of the day's testing and observations.

By Paul Anthony White 1800

Field Compaction Summary, D6938

Project No: 20:1910 Project Name: Stone Garden - Unit 2A Date: 9/4/2025

ECS Southwest, LLP

Client: Lennar

Contractor: Lennar

Technician: Paul Anthony White

Test Method D6938			
Nuclear Gauge No. 26193			
Make	Troxler	Density Std	1481
Model	3430P	Moisture Std	662
Ser. No.	26193		

Sample No.	Description	Proctor Method	Uncorrected Max. Density	Uncorrected Optimum Moisture Content
D4S-22	**SILTY SAND, Light Reddish Brown**	**Standard Proctor Method (ASTM D-698)**	**93.7**	**24.2**
D4S-19	**(SM) SILTY SAND, Light Reddish Brown**	**ASTM D698-12e2-method A**	**97.8**	**19.3**

Test No.	Lot No.	Test Mode	Probe Depth (in.)	Station / Location	Lift / Elev	Sample No.	% Oversize	Corrected Max. Density	Corrected Optimum Moisture Content (%)	Wet Density (pcf)	Dry Density (pcf)	Moisture Content (%)	Percent Comp. (%)	P / F	Comments
1		DT	4	T1A MUDSTONE STA 9+50	Subgrade	D4S-22	0.00	93.7	24.2	109.8	91.2	20.4	97.3	P	Approved by city inspector
2		DT	4	T2A MUDSTONE STA 8+00	SUBGRADE	D4S-22	0.00	93.7	24.2	116.5	95.6	21.9	102.0	P	
3		DT	4	T3A MUDSTONE STA 6+50	SUBGRADE	D4S-19	0.00	97.8	19.3	112.5	92.9	21.0	95.0	P	
4		DT	4	T4A MUDSTONE STA 5+00	SUBGRADE	D4S-19	0.00	97.8	19.3	115.9	97.1	19.4	99.3	P	
5		DT	4	T5A MUDSTONE STA 3+50	SUBGRADE	D4S-19	0.00	97.8	19.3	111.1	95.4	16.4	97.5	P	
6		DT	4	T6A MUDSTONE STA 2+00	SUBGRADE	D4S-19	0.00	97.8	19.3	113.1	96.1	17.6	98.3	P	
7		DT	4	T1B BASALT STA 2+00	SUBGRADE	D4S-19	0.00	97.8	19.3	108.6	93.1	16.6	95.2	P	
8		DT	4	T2B BASALT STA 3+50	SUBGRADE	D4S-19	0.00	97.8	19.3	110.8	94.3	17.6	96.4	P	
9		DT	4	T1C AZZURO STA 2+00	SUBGRADE	D4S-19	0.00	97.8	19.3	115.1	98.4	16.9	100.6	P	
10		DT	4	T2C AZZURO STA 3+50	SUBGRADE	D4S-19	0.00	97.8	19.3	114.3	98.0	16.6	100.2	P	

Test Mode: DT = Direct Transmission BS = Back Scatter

WO: 46046

Field Compaction Summary, D6938

Project No: 20:1910 Project Name: Stone Garden - Unit 2A Date: 9/4/2025

ECS Southwest, LLP

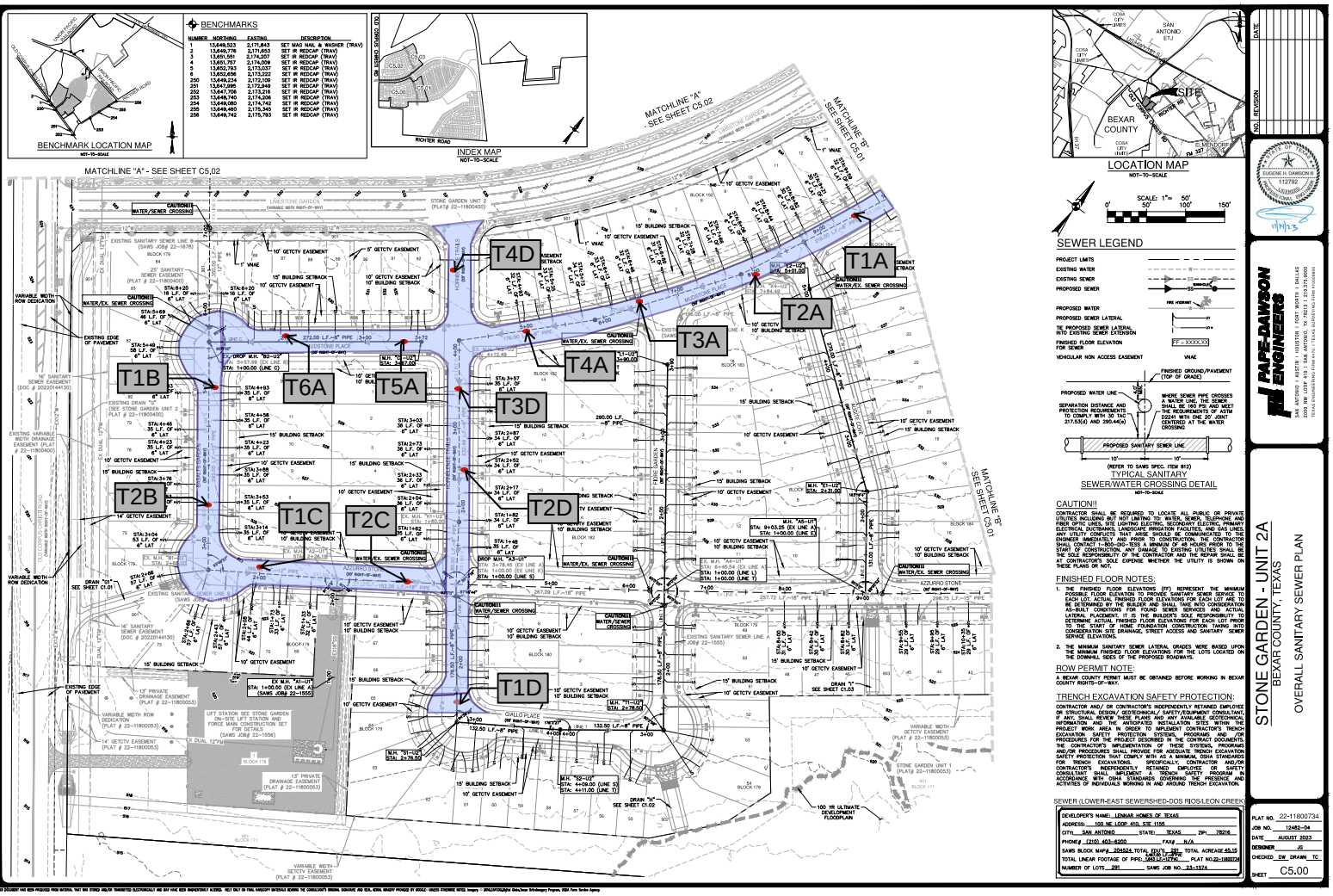
Client: Lennar

Contractor: Lennar

Technician: Paul Anthony White

Test Method D6938			
Nuclear Gauge No. 26193			
Make	Troxler	Density Std	1481
Model	3430P	Moisture Std	662
Ser. No.	26193		

Test No.	Lot No.	Test Mode	Probe Depth (in.)	Station / Location	Lift / Elev	Sample No.	% Oversize	Corrected Max. Density	Corrected Optimum Moisture Content (%)	Wet Density (pcf)	Dry Density (pcf)	Moisture Content (%)	Percent Comp. (%)	P / F	Comments
11		DT	4	T1D HONRBLENDE STA 7+50	SUBG RADE	D4S-19	0.00	97.8	19.3	115.5	95.2	21.4	97.3	P	
12		DT	4	T2D HONRBLENDE STA 4+50	SUBG RADE	D4S-19	0.00	97.8	19.3	115.3	98.4	17.2	100.6	P	
13		DT	4	T3D HONRBLENDE STA 3+00	SUBG RADE	D4S-19	0.00	97.8	19.3	113.7	94.9	19.8	97.0	P	
14		DT	4	T4D HONRBLENDE STA 2+00	SUBG RADE	D4S-19	0.00	97.8	19.3	114.8	96.5	19.0	98.7	P	


BENCHMARKS
NUMBER NORTHING EASTING DESCRIPTION
1 13,649,533 2,171,843 SET MAG NAIL & WASHER (TRAV)
2 13,649,776 2,171,653 SET IR REDCAP (TRAV)
3 13,651,551 2,174,207 SET IR REDCAP (TRAV)
4 13,651,757 2,174,009 SET IR REDCAP (TRAV)
5 13,652,284 2,173,537 SET IR REDCAP (TRAV)
6 13,652,756 2,173,037 SET IR REDCAP (TRAV)
250 13,649,234 2,172,109 SET IR REDCAP (TRAV)
251 13,647,995 2,172,949 SET IR REDCAP (TRAV)
252 13,647,706 2,173,216 SET IR REDCAP (TRAV)
253 13,648,740 2,174,206 SET IR REDCAP (TRAV)
254 13,649,080 2,174,742 SET IR REDCAP (TRAV)
255 13,649,460 2,175,345 SET IR REDCAP (TRAV)
256 13,649,742 2,175,793 SET IR REDCAP (TRAV)
BENCHMARK LOCATION MAP
NOT-TO-SCALE
INDEX MAP
NOT-TO-SCALE
MATCHLINE "A" - SEE SHEET C5.02
MATCHLINE "B" SEE SHEET C5.01
MATCHLINE "C" SEE SHEET C5.01
T1A
T1B
T1C
T1D
T2A
T2B
T2C
T2D
T3A
T4A
T4D
T5A
T6A
LOCATION MAP
NOT-TO-SCALE
SCALE: 1" = 50'
SEWER LEGEND
PROJECT LIMITS
EXISTING WATER
EXISTING SEWER
PROPOSED SEWER
PROPOSED WATER
PROPOSED SEWER LATERAL
TIE PROPOSED SEWER LATERAL INTO EXISTING SEWER EXTENSION
FINISHED FLOOR ELEVATION FOR SEWER
VEHICULAR NON ACCESS EASEMENT
FIRE HYDRANT
FF = XXXX.XX
VNAE
PROPOSED WATER LINE
PROPOSED SANITARY SEWER LINE
FINISHED GROUND/PAVEMENT (TOP OF GRADE)
SEPARATION DISTANCE AND PROTECTION REQUIREMENTS TO COMPLY WITH 30 TAC 217.53(d) AND 290.44(e)
WHERE SEWER PIPE CROSSES A WATER LINE THE SEWER PIPE SHALL BE CLASS 150 PIPE PER ASTM D2241 WITH ONE 20' JOINT CENTERED AT THE WATER CROSSING
(REFER TO SAWS SPEC. ITEM 812)
TYPICAL SANITARY SEWER/WATER CROSSING DETAIL
NOT-TO-SCALE
CAUTION!!
CONTRACTOR SHALL BE REQUIRED TO LOCATE ALL PUBLIC OR PRIVATE UTILITIES INCLUDING BUT NOT LIMITING TO, WATER, SEWER, TELEPHONE AND FIBER OPTIC LINES, SITE LIGHTING ELECTRIC, SECONDARY ELECTRIC, PRIMARY ELECTRICAL, DUCTBANKS, LANDSCAPE IRRIGATION FACILITIES, AND GAS LINES. ANY UTILITY CONFLICTS THAT ARISE SHOULD BE COMMUNICATED TO THE ENGINEER IMMEDIATELY AND PRIOR TO CONSTRUCTION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DAMAGE TO EXISTING UTILITIES DURING START OF CONSTRUCTION, AND DAMAGE TO EXISTING UTILITIES SHALL BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR AND THE REPAIR SHALL BE AT CONTRACTOR'S SOLE EXPENSE WHETHER THE UTILITY IS SHOWN ON THESE PLANS OR NOT.
FINISHED FLOOR NOTES:
1. THE FINISHED FLOOR ELEVATIONS (FF) REPRESENT THE MINIMUM POSSIBLE FLOOR ELEVATION TO PROVIDE SANITARY SEWER SERVICE TO EACH LOT. ACTUAL FINISHED FLOOR ELEVATIONS FOR EACH LOT ARE TO BE THE RESPONSIBILITY OF THE BUILDER AND SHALL BE ENGINEERED AS-BUILT CONDITIONS AND FOUND SEWER SERVICES AND ACTUAL LATERAL PLACEMENT. IT IS THE BUILDER'S SOLE RESPONSIBILITY TO DETERMINE ACTUAL FINISHED FLOOR ELEVATIONS FOR EACH LOT PRIOR TO THE START OF HOME FOUNDATION CONSTRUCTION TAKING INTO CONSIDERATION SITE DRAINAGE, STREET ACCESS AND SANITARY SEWER SERVICE ELEVATIONS.
2. THE MINIMUM SANITARY SEWER LATERAL GRADES WERE BASED UPON THE MINIMUM FINISHED FLOOR ELEVATIONS FOR THE LOTS LOCATED ON THE DOWNHILL SIDES OF THE PROPOSED ROADWAYS.
ROW PERMIT NOTE:
A BEXAR COUNTY PERMIT MUST BE OBTAINED BEFORE WORKING IN BEXAR COUNTY RIGHTS-OF-WAY.
TRENCH EXCAVATION SAFETY PROTECTION:
CONTRACTOR AND / OR CONTRACTOR'S INDEPENDENTLY RETAINED EMPLOYEE OR STRUCTURAL DESIGN / GEOTECHNICAL / SAFETY EQUIPMENT CONSULTANT, IF ANY, SHALL REVIEW THESE PLANS AND ANY AVAILABLE GEOTECHNICAL INFORMATION AND THE ANTICIPATED INSTALLATION SITES WITHIN THE PROJECT WORK AREA IN ORDER TO IMPLEMENT CONTRACTOR'S TRENCH EXCAVATION SAFETY PROTECTION SYSTEMS, PROGRAMS AND /OR PROCEDURES FOR THE PROJECT DESCRIBED IN THE CONTRACT DOCUMENTS. THE CONTRACTOR'S IMPLEMENTATION OF THESE SYSTEMS, PROGRAMS AND/OR PROCEDURES SHALL PROVIDE FOR ADEQUATE TRENCH EXCAVATION SAFETY PROTECTION THAT COMPLY WITH AS A MINIMUM, OSHA STANDARDS FOR TRENCH EXCAVATIONS. SPECIFICALLY, CONTRACTOR AND/OR CONTRACTOR'S INDEPENDENTLY RETAINED EMPLOYEE OR SAFETY CONSULTANT SHALL DESIGN, CONSTRUCT AND MAINTAIN SAFETY SYSTEMS IN ACCORDANCE WITH OSHA STANDARDS GOVERNING THE SAFE PRESENCE AND ACTIVITIES OF INDIVIDUALS WORKING IN AND AROUND TRENCH EXCAVATION.
SEWER (LOWER-EAST SEWERSHED-DOS RIOS/LEON CREEK)
DEVELOPER'S NAME: LENNAR HOMES OF TEXAS
ADDRESS: 100 NE LOOP 410, STE 1155
CITY: SAN ANTONIO STATE: TEXAS ZIP: 78216
PHONE # (210) 403-8200 FAX # N/A
SAWS BLOCK MAP # 204524, TOTAL EDU'S: 291, TOTAL ACREAGE 45.15
TOTAL LINEAR FOOTAGE OF PIPE: 7,065 LF-12"PVC PLAT NO. 22-11800734
NUMBER OF LOTS: 291 SAWS JOB NO. 23-1574
DATE
NO. REVISION
EUGENE H. DAWSON III 112782 REGISTERED PROFESSIONAL ENGINEER 11/9/23
PAPE-DAWSON ENGINEERS
SAN ANTONIO / AUSTIN / HOUSTON / FORT WORTH / DALLAS
2000 NW LOOP 410 / SAN ANTONIO, TX 78213 / 210.375.9000
TEXAS BOARD/REGISTRATION #470 / TEXAS SURVEYING FIRM #100288-00
STONE GARDEN - UNIT 2A
BEXAR COUNTY, TEXAS
OVERALL SANITARY SEWER PLAN
PLAT NO. 22-11800734
JOB NO. 12462-04
DATE AUGUST 2023
DESIGNER JD
CHECKED DW DRAWN TC
SHEET C5.00

Attachments

Roller

Figure 1

MUDSTONE

Figure 2

Attachments

MUDSTONE Con.

Figure 3

MUDSTONE Con.

Figure 4

Attachments

BASALT

Figure 5

AZZURO

Figure 6

Attachments

HORNBLENDE

Figure 7

TX Registered Firm # F-8461

ECS Southwest, LLP
431 Isom Road, Suite 114
San Antonio, TX 78216
T 210.528.1430
F 214.483.9684

LETTER OF TRANSMITTAL

September 08, 2025
Lennar
100 NE Loop 410 Suite 1155
San Antonio, TX 78216

ATTN: Mr. Nathan Nowell

RE: **Stone Garden - Unit 2A**
ECS Job # **20:1910**

Permits:
Location: **14395 Old Corpus Christi Road**
Elmendorf, TX 78112

X Field Reports **X** For your use **X** As requested

CC: City of San Antonio - Development Services Department - Juan Ramirez
Lennar - Rogelio "Roy" Olivarez, Jr.
V.K. Knowlton Construction - Sammy Ramos

ENCL: Field Report # 90 9/5/2025 Soil Density Testing

Adam James Heiman, P.E.
Assistant Office Manager

Stephanie Marie Chavez
CMT Project Professional I

TX Registered Engineering Firm # F-8461

ECS Southwest, LLP
431 Isom Road, Suite 114
San Antonio, TX 78216
T 210.528.1430
F 214.483.9684

FIELD REPORT

Project	**Stone Garden - Unit 2A**
Location	**Elmendorf, TX**
Client	**Lennar**
Contractor	**Lennar**

Project No.	**20:1910**
Report No.	**90**
Day & Date	**Friday 9/5/2025**
Weather	**99 °/ Sunny**
On-Site Time	**2.00**
Lab Time	**0.25**
Travel Time*	**0.50**
Total	**2.75**
Re Obs Time	**0.00**

Remarks **Soil Density Testing**

Trip Charges*	Tolls/Parking*	Mileage*	Time of	Arrival	Departure
35.00				**8:30A**	**10:30A**
Chargeable Items **5000**					

* Travel time and mileage will be billed in accordance with the contract.

Summary of Services Performed (field test data, locations, elevations & depths are estimates) & Individuals Contacted.

The undersigned arrived on-site, as requested to observe the placement and compaction of Base Material.

Locations:
Granite Garden, First lift
Dacite Place, First lift.

Please see the attached sketch.

Civil plan Pages C5.02 and 5.03 dated 11/14/23 and the Geotechnical Report dated 4/25/22 were reviewed prior to testing.

Utilizing Nuclear Method ASTM D 6938, to check the compaction of Base material at the areas and elevations tested, test results met the project requirements of 95% of the corrected maximum dry density and a moisture content of -2% to 3%from optimum, as determined in our laboratory using the TxDOT Test Method TEX-113-E.

While on site, the undersigned observed the placement and compaction of Lime Stabilized Subgrade.

Locations:
CHALK CAVE, Subgrade
FIORE GARDEN, Subgrade
AZZURRO GARDEN, Subgrade
GIALLO PLACE, Subgrade

Please see the attached sketch.

By Paul Anthony White 1800

Civil plan page C7.00 Dated 11/14/23 and the Geotechnical Report dated 4/25/22 were reviewed prior to testing.

Utilizing Nuclear Method ASTM D 6938, to check the compaction of subgrade at the areas and elevations tested, test results met the project requirements of 95% of the corrected maximum dry density and a moisture content of -3% to 3% from optimum as approved by City Inspector and as determined in our laboratory using the Standard Proctor Method ASTM D698.

Prior to departure, Sammy Ramos and Pablo with V.K Knowlton was informed of the results of the day's testing and observations.

Field Compaction Summary, D6938

Project No: 20:1910 Project Name: Stone Garden - Unit 2A Date: 9/5/2025

ECS Southwest, LLP

Client: Lennar

Contractor: Lennar

Technician: Paul Anthony White

Test Method D6938			
Nuclear Gauge No. 75821			
Make	Troxler	Density Std	2364
Model	3430P	Moisture Std	736
Ser. No.	78521		

Sample No.	Description	Proctor Method	Uncorrected Max. Density	Uncorrected Optimum Moisture Content
D4S-12	**(GP-GC) POORLY GRADED GRAVEL WITH SILTY CLAY & SAND, Light Tan**	**TEX-113-E**	**137.7**	**4.5**
D4S-19	**(SM) SILTY SAND, Light Reddish Brown**	**ASTM D698-12e2-method A**	**97.8**	**19.3**

Test No.	Lot No.	Test Mode	Probe Depth (in.)	Station / Location	Lift / Elev	Sample No.	% Oversize	Corrected Max. Density	Corrected Optimum Moisture Content (%)	Wet Density (pcf)	Dry Density (pcf)	Moisture Content (%)	Percent Comp. (%)	P / F	Comments
1		DT	4	T1A Dacite Place, STA 1+50	1st Lift	D4S-12	0.00	137.7	4.5	154.3	147.5	4.6	107.1	P	
2		DT	4	T2A Dacite Place, STA 3+50	1st Lift	D4S-12	0.00	137.7	4.5	144.9	139.1	4.1	101.0	P	
3		DT	4	T3A Dacite Place, STA 4+00	1st Lift	D4S-12	0.00	137.7	4.5	151.2	144.7	4.4	105.1	P	
4		DT	4	T4A Dacite Place, STA 5+69	1st Lift	D4S-12	0.00	137.7	4.5	157.7	151.1	4.4	109.7	P	
5		DT	4	T1B Granite Garden, STA 9+50	1st Lift	D4S-12	0.00	137.7	4.5	152.8	146.2	4.6	106.2	P	
6		DT	4	T2B Granite Garden, STA 11+00	1st Lift	D4S-12	0.00	137.7	4.5	150.0	142.5	5.2	103.5	P	
7		DT	4	T3B Granite Garden, STA 12+50	1st Lift	D4S-12	0.00	137.7	4.5	150.1	141.6	6.0	102.8	P	
8		DT	4	T1C, Azzurro Garden, STA 4+50	SUBGRADE	D4S-19	0.00	97.8	19.3	117.5	99.2	18.5	101.4	P	
9		DT	4	T2C, Azzurro Garden, STA 6+00	SUBGRADE	D4S-19	0.00	97.8	19.3	110.2	99.8	18.4	102.0	P	

Test Mode: DT = Direct Transmission BS = Back Scatter

WO: 45957

Field Compaction Summary, D6938

Project No: 20:1910 Project Name: Stone Garden - Unit 2A Date: 9/5/2025

ECS Southwest, LLP

Client: Lennar

Contractor: Lennar

Technician: Paul Anthony White

Test Method D6938			
Nuclear Gauge No. 75821			
Make	Troxler	Density Std	2364
Model	3430P	Moisture Std	736
Ser. No.	78521		

Test No.	Lot No.	Test Mode	Probe Depth (in.)	Station / Location	Lift / Elev	Sample No.	% Oversize	Corrected Max. Density	Corrected Optimum Moisture Content (%)	Wet Density (pcf)	Dry Density (pcf)	Moisture Content (%)	Percent Comp. (%)	P / F	Comments
10		DT	4	T3C, Azzurro Garden, STA 7+50	SUBGRADE	D4S-19	0.00	97.8	19.3	125.0	107.1	16.7	109.5	P	
11		DT	4	T4C, Azzurro Garden, STA 9+00	SUBGRADE	D4S-19	0.00	97.8	19.3	120.8	102.7	17.5	105.0	P	
12		DT	4	T5C, Azzurro Garden, STA 10+50	SUBGRADE	D4S-19	0.00	97.8	19.3	114.1	96.7	18.0	98.9	P	
13		DT	4	T6C, Azzurro Garden, STA 11+50	SUBGRADE	D4S-19	0.00	97.8	19.3	118.6	101.4	17.0	103.7	P	
14		DT	4	T7C, Azzurro Garden, STA 13+00	SUBGRADE	D4S-19	0.00	97.8	19.3	126.0	105.0	20.0	107.4	P	
15		DT	4	T1D, Chalk Cave, STA 15+00	SUBGRADE	D4S-19	0.00	97.8	19.3	129.4	108.7	19.1	111.1	P	
16		DT	4	T2D, Chalk Cave, STA 13+50	SUBGRADE	D4S-19	0.00	97.8	19.3	120.2	100.8	19.1	103.1	P	
17		DT	4	T3D, Chalk Cave, STA 12+00	SUBGRADE	D4S-19	0.00	97.8	19.3	122.9	100.7	22.1	103.0	P	
18		DT	4	T4D, Chalk Cave, STA 10+50	SUBGRADE	D4S-19	0.00	97.8	19.3	120.9	99.6	21.4	101.8	P	
19		DT	4	T1E, Fiore Garden, STA 1+50	SUBGRADE	D4S-19	0.00	97.8	19.3	116.3	98.7	17.8	100.9	P	
20		DT	4	T2E, Fiore Garden, STA 3+00	SUBGRADE	D4S-19	0.00	97.8	19.3	114.7	94.2	21.8	96.3	P	
21		DT	4	T3E, Fiore Garden, STA 5+09.86	SUBGRADE	D4S-19	0.00	97.8	19.3	121.7	104.6	16.4	107.0	P	
22		DT	4	T1F, Giallo Place, STA 3+00	SUBGRADE	D4S-19	0.00	97.8	19.3	119.9	101.7	17.9	104.0	P	

Test Mode: DT = Direct Transmission BS = Back Scatter

WO: 45957

Field Compaction Summary, D6938

Project No: 20:1910 Project Name: Stone Garden - Unit 2A Date: 9/5/2025

ECS Southwest, LLP

Client: Lennar

Contractor: Lennar

Technician: Paul Anthony White

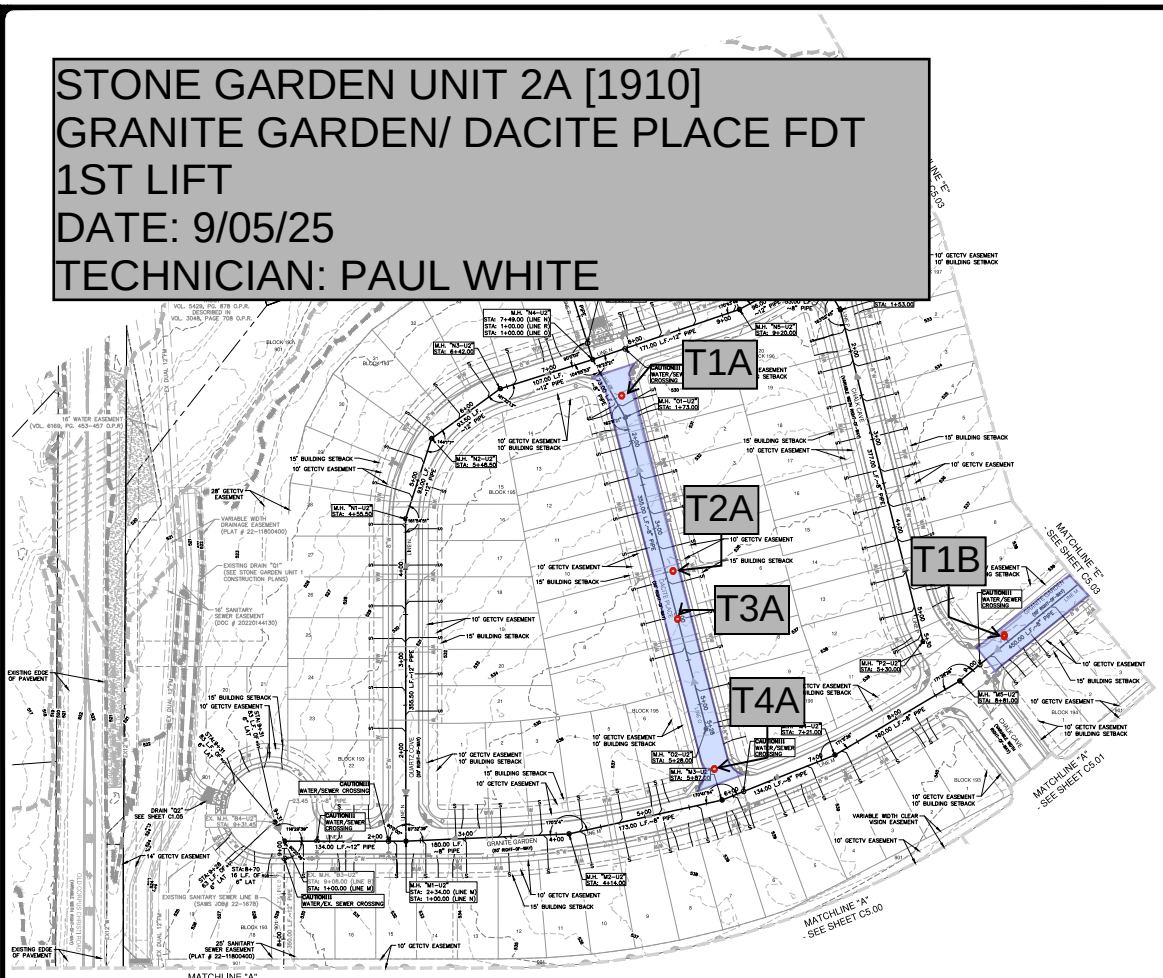
Test Method D6938			
Nuclear Gauge No. 75821			
Make	Troxler	Density Std	2364
Model	3430P	Moisture Std	736
Ser. No.	78521		

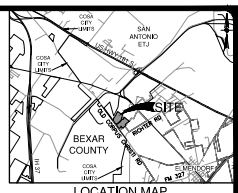
Test No.	Lot No.	Test Mode	Probe Depth (in.)	Station / Location	Lift / Elev	Sample No.	% Oversize	Corrected Max. Density	Corrected Optimum Moisture Content (%)	Wet Density (pcf)	Dry Density (pcf)	Moisture Content (%)	Percent Comp. (%)	P / F	Comments
23		DT	4	T2F, Giallo Place, STA 2+00	SUBGRADE	D4S-19	0.00	97.8	19.3	123.8	106.4	16.4	108.8	P	

Test Mode: DT = Direct Transmission BS = Back Scatter

WO: 45957

STONE GARDEN UNIT 2A [1910]
GRANITE GARDEN/ DACITE PLACE FDT
1ST LIFT
DATE: 9/05/25
TECHNICIAN: PAUL WHITE



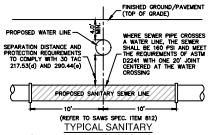


LOCATION MAP
NOT-TO-SCALE

SCALE: 1" = 50'
0' 50' 100' 150'

SEWER LEGEND

PROJECT LIMITS
EXISTING WATER
EXISTING SEWER
PROPOSED SEWER
PROPOSED WATER
PROPOSED SEWER LATERAL
TE PROPOSED SEWER LATERAL INTO EXISTING SEWER EXTENSION
FINISHED FLOOR ELEVATION FOR SEWER (FF = XXXX.XX)
VEHICULAR NON ACCESS EASEMENT (VNAE)
FIRE HYDRANT



TYPICAL SANITARY SEWER/WATER CROSSING DETAIL
NOT-TO-SCALE

CAUTION!!

CONTRACTOR SHALL BE REQUIRED TO LOCATE ALL PUBLIC OR PRIVATE UTILITIES INCLUDING BUT NOT LIMITED TO, WATER, SEWER, TELEPHONE AND FIBER OPTIC LINES, SITE LIGHTING ELECTRIC, SECONDARY ELECTRIC, PRIMARY ELECTRICAL DUCTBANKS, LANDSCAPE IRRIGATION FACILITIES, AND GAS LINES. ANY UTILITY CONFLICTS THAT ARISE SHOULD BE COMMUNICATED TO THE ENGINEER IMMEDIATELY AND PRIOR TO CONSTRUCTION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DAMAGE TO EXISTING UTILITIES DURING START OF CONSTRUCTION, AND DAMAGE TO EXISTING UTILITIES SHALL BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR AND THE REPAIR SHALL BE AT CONTRACTOR'S SOLE EXPENSE WHETHER THE UTILITY IS SHOWN ON THESE PLANS OR NOT.

FINISHED FLOOR NOTES:

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2. THE MINIMUM SANITARY SEWER LATERAL GRADES WERE BASED UPON THE MINIMUM FINISHED FLOOR ELEVATIONS FOR THE LOTS LOCATED ON THE DOWNHILL SIDES OF THE PROPOSED ROADWAYS.

ROW PERMIT NOTE:

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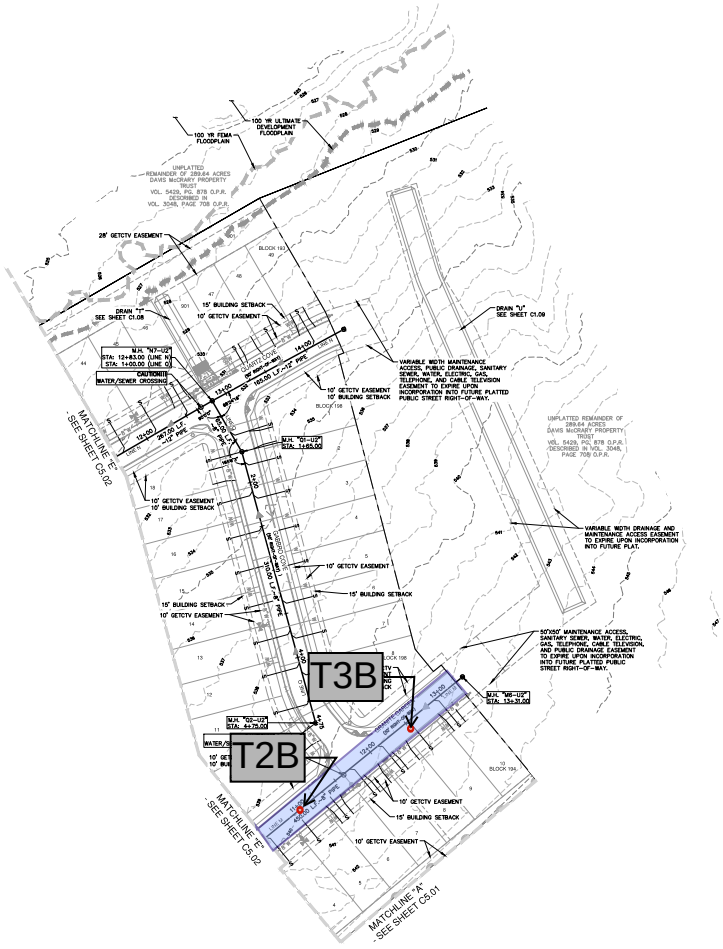
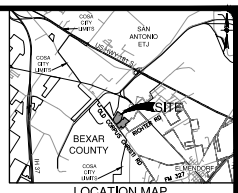
SEWER (LOWER-EAST SEWERSHED-DOS RIOS/LEON CREEK)

DEVELOPER'S NAME: LENNAR HOMES OF TEXAS	
ADDRESS: 100 NE LOOP 410, STE 1155	
CITY: SAN ANTONIO STATE: TEXAS ZIP: 78216	
PHONE#: (210) 403-8200 FAX#: N/A	
SAWS BLOCK MAP#: 204524, TOTAL EDU'S: 291, TOTAL ACREAGE: 45.15	
TOTAL LINEAR FOOTAGE OF PIPE: 7,065 LF-12"PVC	LAND TYPE: SF PLAT NO.22-11800734
NUMBER OF LOTS: 291	SAWS JOB NO.: 23-1574

STONE GARDEN - UNIT 2A
BEXAR COUNTY, TEXAS
OVERALL SANITARY SEWER PLAN

PLAT NO.	22-11800734
JOB NO.	12462-04
DATE	AUGUST 2023
DESIGNED	JG
CHECKED	DW DRAWN TC
SHEET	C5.02





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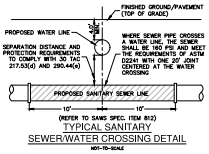

(REFER TO SAWS SPEC. ITEM 812)
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TOTAL LINEAR FOOTAGE OF PIPE: 5,065 LF-12"PVC LAND TYPE: MF
NUMBER OF LOTS 291 SAWS JOB NO. 23-1574
PLAT NO. 22-11800734

DATE | NO. | REVISION

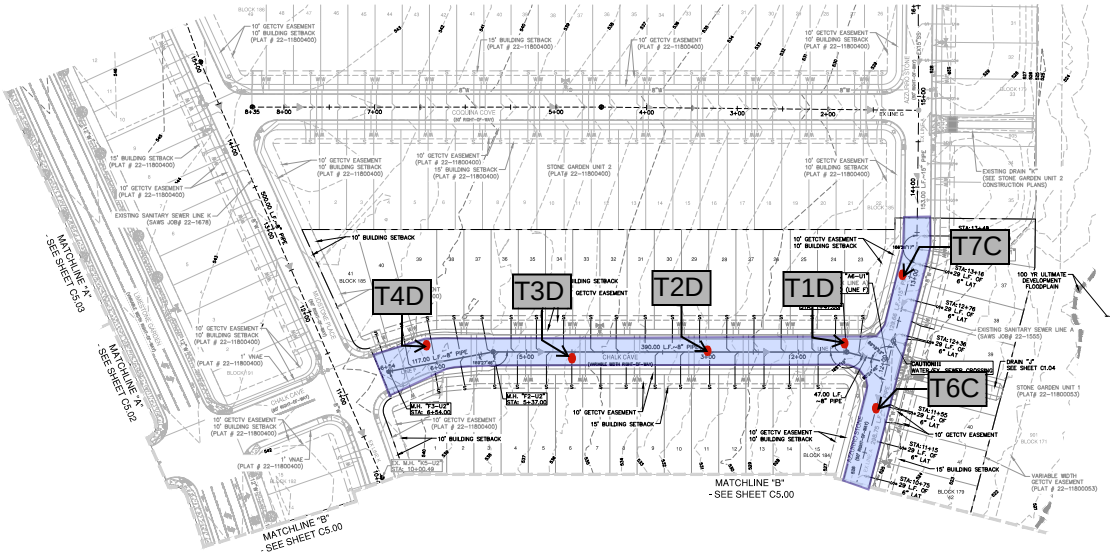
EUGENE H. DAWSON III 112782 LICENSED PROFESSIONAL ENGINEER 11/7/23

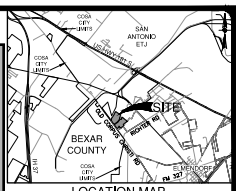
PAPE-DAWSON ENGINEERS
SAN ANTONIO | AUSTIN | HOUSTON | FORT WORTH | DALLAS
2000 NW LOOP 410 | SAN ANTONIO, TX 78213 | 210.375.9000
TEXAS BOARD/BUSINESS REG #470 | TEXAS SURVEY FIRM #100288-00

STONE GARDEN - UNIT 2A
BEXAR COUNTY, TEXAS
OVERALL SANITARY SEWER PLAN

JOB NO. 12482-04
DATE AUGUST 2023
DESIGNER JG
CHECKED DW DRAWN TC
SHEET C5.03

STONE GARDEN UNIT 2 [1910]
LIME SUBGRADE FDT
AZZURRO STONE, CHALK CAVE, FIORE GARDEN, GIALLO PLACE
DATE: 9/05/25
TECHNICIAN: PAUL WHITE





LOCATION MAP
NOT-TO-SCALE

SCALE: 1" = 50'
0' 50' 100' 150'

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EXISTING WATER
EXISTING SEWER
PROPOSED SEWER
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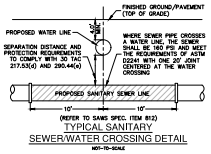

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SEWER (LOWER-EAST SEWERSHED-DOS RIOS/LEON CREEK)

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TOTAL LINEAR FOOTAGE OF PIPE: 7,065 LF-12"PVC PLAT NO.: 22-11800734
NUMBER OF LOTS: 291 SAWS JOB NO.: 23-1574

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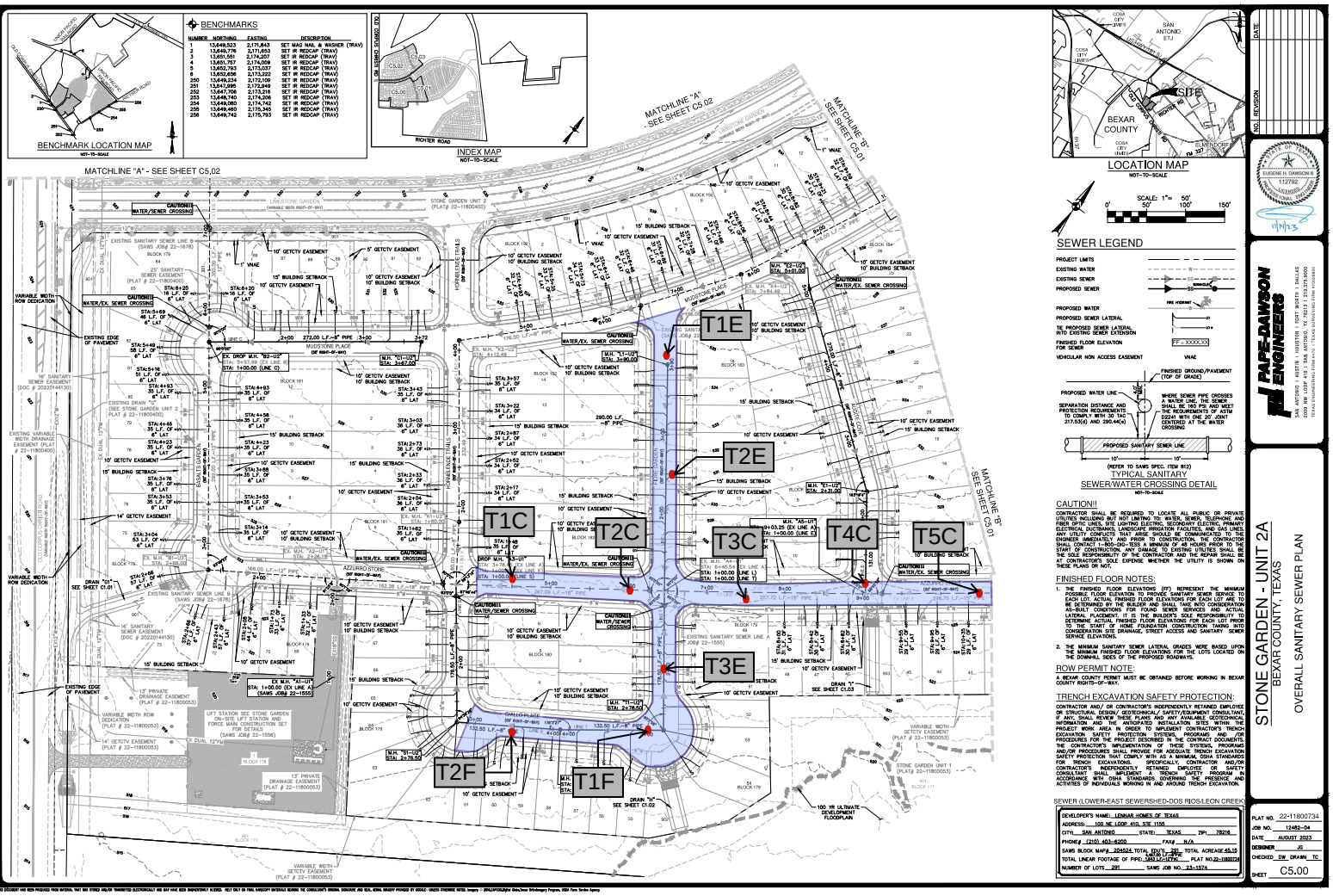
TEXAS BOARD/REGISTERED ENGINEERING FIRM F-1000 | TEXAS BOARD/PROFESSIONAL SURVEYING FIRM LIC. #100288-00

STONE GARDEN - UNIT 2A
BEXAR COUNTY, TEXAS
OVERALL SANITARY SEWER PLAN

PLAT NO. 22-11800734
JOB NO. 12462-04
DATE AUGUST 2023
DESIGNER JG
CHECKED DW DRAWN TC
SHEET C5.01


BENCHMARKS
NUMBER NORTHING EASTING DESCRIPTION
1 13,649,533 2,171,843 SET MAG NAIL & WASHER (TRAV)
2 13,649,776 2,171,653 SET IR REDCAP (TRAV)
3 13,651,551 2,174,207 SET IR REDCAP (TRAV)
4 13,651,757 2,174,009 SET IR REDCAP (TRAV)
5 13,652,284 2,173,537 SET IR REDCAP (TRAV)
6 13,652,782 2,173,037 SET IR REDCAP (TRAV)
250 13,649,234 2,172,109 SET IR REDCAP (TRAV)
251 13,647,995 2,172,949 SET IR REDCAP (TRAV)
252 13,647,706 2,173,216 SET IR REDCAP (TRAV)
253 13,648,740 2,174,206 SET IR REDCAP (TRAV)
254 13,649,080 2,174,742 SET IR REDCAP (TRAV)
255 13,649,460 2,175,340 SET IR REDCAP (TRAV)
256 13,649,742 2,175,793 SET IR REDCAP (TRAV)
BENCHMARK LOCATION MAP
NOT-TO-SCALE
INDEX MAP
NOT-TO-SCALE
MATCHLINE "A" - SEE SHEET C5.02
MATCHLINE "A" - SEE SHEET C5.02
MATCHLINE "B" SEE SHEET C5.01
MATCHLINE "B" SEE SHEET C5.01
T1E
T2E
T1C
T2C
T3C
T4C
T5C
T3E
T2F
T1F
LOCATION MAP
NOT-TO-SCALE
SCALE: 1" = 50'
SEWER LEGEND
PROJECT LIMITS
EXISTING WATER
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TIE PROPOSED SEWER LATERAL INTO EXISTING SEWER EXTENSION
FINISHED FLOOR ELEVATION FOR SEWER
VEHICULAR NON ACCESS EASEMENT
FF = XXXX.XX
VNAE
PROPOSED WATER LINE
SEPARATION DISTANCE AND PROTECTION REQUIREMENTS TO COMPLY WITH 30 TAC 217.53(d) AND 290.44(e)
WHERE SEWER PIPE CROSSES A WATER LINE, THE SEWER PIPE SHALL BE PER SHEET C5.00 AS SURROGATE OF ASTM D2241 WITH ONE 20' JOINT CENTERED AT THE WATER CROSSING
FINISHED GROUND/PAVEMENT (TOP OF GRADE)
PROPOSED SANITARY SEWER LINE
10"
10"
(REFER TO SAWS SPEC. ITEM 812)
TYPICAL SANITARY SEWER/WATER CROSSING DETAIL
NOT-TO-SCALE
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EUGENE H. DAWSON III 112762 REGISTERED PROFESSIONAL ENGINEER STATE OF TEXAS
11/9/23
DATE
NO. REVISION
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DATE AUGUST 2023
DESIGNER JD
CHECKED DW DRAWN TC
SHEET C5.00

Attachments

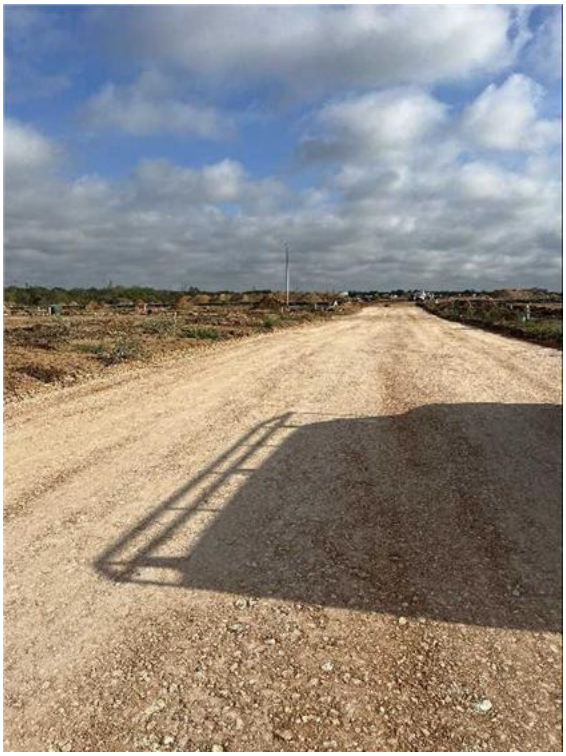
COMPACTION METHOD

Figure 1

DACITE PLACE TESTING

Figure 2

Attachments



GRANITE GARDEN TESTING

Figure 3

AZZURRO STONE TESTING

Figure 4

Attachments

AZZURRO Con.

Figure 5

AZZURRO End

Figure 6

Attachments

CHALK CAVE TESTING

Figure 7

FIORE TESTING

Figure 8

Attachments

GIALLO TESTING

Figure 9

TX Registered Firm # F-8461

ECS Southwest, LLP
431 Isom Road, Suite 114
San Antonio, TX 78216
T 210.528.1430
F 214.483.9684

LETTER OF TRANSMITTAL

September 10, 2025
Lennar
100 NE Loop 410 Suite 1155
San Antonio, TX 78216

ATTN: Mr. Nathan Nowell

RE: **Stone Garden - Unit 2A**
ECS Job # **20:1910**

Permits:
Location: **14395 Old Corpus Christi Road**
Elmendorf, TX 78112

X Field Reports **X** For your use **X** As requested

CC: City of San Antonio - Development Services Department - Juan Ramirez
Lennar - Rogelio "Roy" Olivarez, Jr.
V.K. Knowlton Construction - Sammy Ramos

ENCL: Field Report # 91 9/10/2025 Soil Density Testing

Adam James Heiman, P.E.
Assistant Office Manager

Stephanie Marie Chavez
CMT Project Professional I

TX Registered Engineering Firm # F-8461

ECS Southwest, LLP
431 Isom Road, Suite 114
San Antonio, TX 78216
T 210.528.1430
F 214.483.9684

FIELD REPORT

Project	**Stone Garden - Unit 2A**
Location	**Elmendorf, TX**
Client	**Lennar**
Contractor	**Lennar**

Project No.	**20:1910**
Report No.	**91**
Day & Date	**Wednesday 9/10/2025**
Weather	**80 °/ Clear**
On-Site Time	**2.25**
Lab Time	**0.25**
Travel Time*	**0.58**
Total	**3.08**
Re Obs Time	**0.00**

Remarks **Soil Density Testing**

Trip Charges*	Tolls/Parking*	Mileage*	Time of	Arrival	Departure
35.00				**8:00A**	**10:15A**
Chargeable Items **5000**					

* Travel time and mileage will be billed in accordance with the contract.

Summary of Services Performed (field test data, locations, elevations & depths are estimates) & Individuals Contacted.

The undersigned arrived on-site, as requested to observe the placement and compaction of base material.

Location:
Chalk Road, STA 4+50-6+50, lift 1

Please see the attached sketch.

Civil plan page C2.16 dated 09.11.2023 and Geotechnical Report dated 04.25.2022 were reviewed prior to testing.

Utilizing the Nuclear Method ASTM D6938, to check the compaction of select fill at the areas and elevations tested, test results met the project requirements of 95% of the corrected maximum dry density and a moisture content of -2% to +3% from optimum, as determined in our laboratory using the Proctor Method TEX-113-E.

Prior to departure, Sammy Ramos with V.K Knowlton and Santiago V. with COSA was informed of the results of the day's testing and observations.

By JT Gomez 1800

Field Compaction Summary, D6938

Project No: 20:1910 Project Name: Stone Garden - Unit 2A Date: 9/10/2025

ECS Southwest, LLP

Client: Lennar

Contractor: Lennar

Technician: JT Gomez

Test Method D6938			
Nuclear Gauge No. 78650			
Make		Density Std	2238
Model		Moisture Std	655
Ser. No.	78650		

Sample No.	Description	Proctor Method	Uncorrected Max. Density	Uncorrected Optimum Moisture Content
D4S-12	**Poorly Graded Gravel with silty clay and sand, Light Tan**	**Proctor Method TEX 113E**	**137.7**	**4.5**

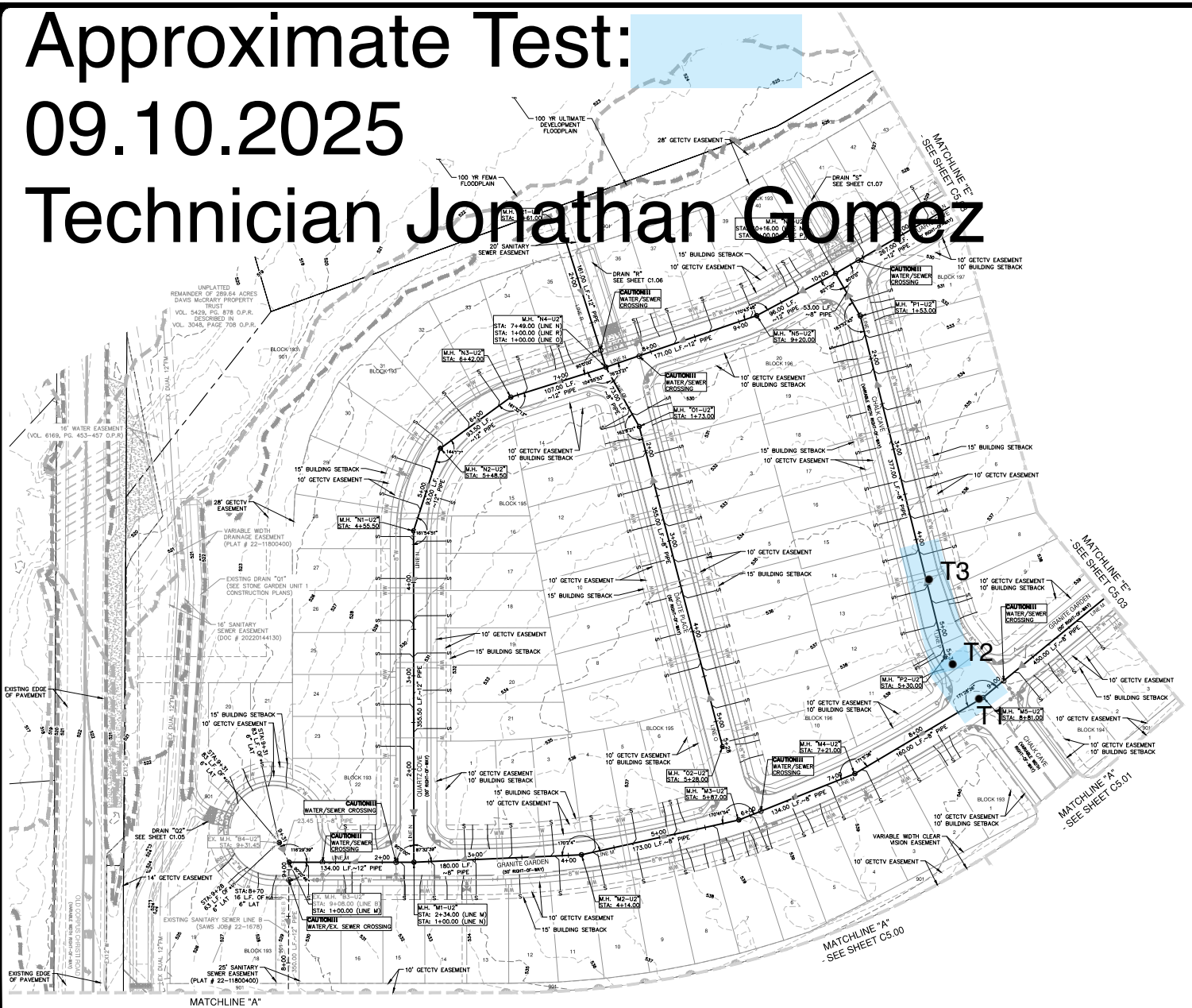
Test No.	Lot No.	Test Mode	Probe Depth (in.)	Station / Location	Lift / Elev	Sample No.	% Oversize	Corrected Max. Density	Corrected Optimum Moisture Content (%)	Wet Density (pcf)	Dry Density (pcf)	Moisture Content (%)	Percent Comp. (%)	P / F	Comments
1		DT	6	STA 6+50	2	D4S-12	0.00	137.7	4.5	153.2	145.3	5.5	105.5	P	Passed by Santiago V with COSA
2		DT	6	5+50	2	D4S-12	0.00	137.7	4.5	181.7	135.5	4.6	98.4	P	
3		DT	6	4+50	2	D4S-12	0.00	137.7	4.5	151.7	145.3	4.4	105.5	P	Passed by Santiago V with COSA

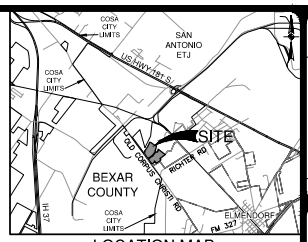
Test Mode: DT = Direct Transmission BS = Back Scatter

WO: 46255

1910 Stone Garden- Unit 2A FDTs

Approximate Test:
09.10.2025
Technician Jonathan Gomez

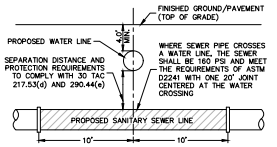




SCALE: 1" = 50'
0' 50' 100' 150'

SEWER LEGEND

PROJECT LIMITS
EXISTING WATER
EXISTING SEWER
PROPOSED SEWER
MANHOLE
PROPOSED WATER
FIRE HYDRANT
PROPOSED SEWER LATERAL
TIE PROPOSED SEWER LATERAL INTO EXISTING SEWER EXTENSION
FINISHED FLOOR ELEVATION FOR SEWER — FF = XXXX.XX
VEHICULAR NON ACCESS EASEMENT — VNAE



TYPICAL SANITARY SEWER/WATER CROSSING DETAIL
NOT-TO-SCALE

CAUTION!!

CONTRACTOR SHALL BE REQUIRED TO LOCATE ALL PUBLIC OR PRIVATE UTILITIES INCLUDING BUT NOT LIMITING TO: WATER, SEWER, TELEPHONE AND FIBER OPTIC LINES, SITE LIGHTING ELECTRIC, SECONDARY ELECTRIC, PRIMARY ELECTRICAL DUCTBANKS, LANDSCAPE IRRIGATION FACILITIES, AND GAS LINES. ANY UTILITY CONFLICTS THAT ARISE SHOULD BE COMMUNICATED TO THE ENGINEER IMMEDIATELY AND PRIOR TO CONSTRUCTION. THE CONTRACTOR SHALL CONTACT 1-800-DIG-TESS A MINIMUM OF 48 HOURS PRIOR TO THE START OF CONSTRUCTION. ANY DAMAGE TO EXISTING UTILITIES SHALL BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR AND THE REPAIR SHALL BE AT CONTRACTOR'S SOLE EXPENSE WHETHER THE UTILITY IS SHOWN ON THESE PLANS OR NOT.

FINISHED FLOOR NOTES:

1. THE FINISHED FLOOR ELEVATIONS (FF) REPRESENT THE MINIMUM POSSIBLE FLOOR ELEVATION TO PROVIDE SANITARY SEWER SERVICE TO EACH LOT. ACTUAL FINISHED FLOOR ELEVATIONS FOR EACH LOT ARE TO BE DETERMINED BY THE BUILDER AND SHALL TAKE INTO CONSIDERATION AS-BUILT CONDITIONS FOR FOUND SEWER SERVICES AND ACTUAL LATERAL PLACEMENT. IT IS THE BUILDER'S SOLE RESPONSIBILITY TO DETERMINE ACTUAL FINISHED FLOOR ELEVATIONS FOR EACH LOT PRIOR TO THE START OF HOME FOUNDATION CONSTRUCTION TAKING INTO CONSIDERATION SITE DRAINAGE, STREET ACCESS AND SANITARY SEWER SERVICE ELEVATIONS.
2. THE MINIMUM SANITARY SEWER LATERAL GRADES WERE BASED UPON THE MINIMUM FINISHED FLOOR ELEVATIONS FOR THE LOTS LOCATED ON THE DOWNHILL SIDES OF THE PROPOSED ROADWAYS.

ROW PERMIT NOTE:

A BEXAR COUNTY PERMIT MUST BE OBTAINED BEFORE WORKING IN BEXAR COUNTY RIGHTS-OF-WAY.

TRENCH EXCAVATION SAFETY PROTECTION:

CONTRACTOR AND/ OR CONTRACTOR'S INDEPENDENTLY RETAINED EMPLOYEE OR STRUCTURAL DESIGN/ GEOTECHNICAL/ SAFETY/EQUIPMENT CONSULTANT, IF ANY, SHALL REVIEW THESE PLANS AND ANY AVAILABLE GEOTECHNICAL INFORMATION AND THE ANTICIPATED INSTALLATION SITES WITHIN THE PROJECT WORK AREA IN ORDER TO IMPLEMENT CONTRACTOR'S TRENCH EXCAVATION SAFETY PROTECTION SYSTEMS, PROGRAMS AND /OR PROCEDURES FOR THE PROJECT DESCRIBED IN THE CONTRACT DOCUMENTS. THE CONTRACTOR'S IMPLEMENTATION OF THESE SYSTEMS, PROGRAMS AND/OR PROCEDURES SHALL PROVIDE FOR ADEQUATE TRENCH EXCAVATION SAFETY PROTECTION THAT COMPLY WITH AS A MINIMUM, OSHA STANDARDS FOR TRENCH EXCAVATIONS. SPECIFICALLY, CONTRACTOR AND/OR CONTRACTOR'S INDEPENDENTLY RETAINED EMPLOYEE OR SAFETY CONSULTANT SHALL IMPLEMENT A TRENCH SAFETY PROGRAM IN ACCORDANCE WITH OSHA STANDARDS GOVERNING THE PRESENCE AND ACTIVITIES OF INDIVIDUALS WORKING IN AND AROUND TRENCH EXCAVATION.

SEWER (LOWER-EAST SEWERSHED-DOS RIOS/LEON CREEK)

DEVELOPER'S NAME: LENNAR HOMES OF TEXAS
ADDRESS: 100 NE LOOP 410, STE 1156
CITY: SAN ANTONIO STATE: TEXAS ZIP: 78216
PHONE# (210) 403-6200 FAX# N/A
SAWS BLOCK MAP# 204524 TOTAL EDU'S 291 TOTAL ACREAGE 45.15
TOTAL LINEAR FOOTAGE OF PIPE: 6,467.00 LF-8"PVC 1,693 LF-12"PVC PLAT NO. 22-11800734
NUMBER OF LOTS 291 SAWS JOB NO. 23-1574

NO.	REVISION	DATE

EUGENE H. DAWSON III 112792 LICENSED PROFESSIONAL ENGINEER 11/9/23

PAPE-DAWSON ENGINEERS
SAN ANTONIO | AUSTIN | HOUSTON | FORT WORTH | DALLAS
2000 NW LOOP 410 | SAN ANTONIO, TX 78213 | 210.375.9000
TEXAS ENGINEERING FIRM #470 | TEXAS SURVEYING FIRM #100288-00

STONE GARDEN - UNIT 2A
BEXAR COUNTY, TEXAS
OVERALL SANITARY SEWER PLAN

PLAT NO. 22-11800734
JOB NO. 12482-04
DATE AUGUST 2023
DESIGNER JG
CHECKED DW DRAWN TC
SHEET C5.02

Date: Nov 16, 2023, 6:07pm User: kjhale
File: P:\12482\04\Civil\Unit-2A\Civil\12482504-U2A.dwg

Attachments

Chalk Road pic 1

Figure 1

Chalk Road pic 2

Figure 2

TX Registered Firm # F-8461

ECS Southwest, LLP
431 Isom Road, Suite 114
San Antonio, TX 78216
T 210.528.1430
F 214.483.9684

LETTER OF TRANSMITTAL

September 15, 2025
Lennar
100 NE Loop 410 Suite 1155
San Antonio, TX 78216

ATTN: Mr. Nathan Nowell

RE: **Stone Garden - Unit 2A**
ECS Job # **20:1910**

Permits:
Location: **14395 Old Corpus Christi Road**
Elmendorf, TX 78112

X Field Reports **X** For your use **X** As requested

CC: City of San Antonio - Development Services Department - Juan Ramirez
Lennar - Rogelio "Roy" Olivarez, Jr.
V.K. Knowlton Construction - Sammy Ramos

ENCL: Field Report # 92 9/12/2025 Soil Density Testing

Adam James Heiman, P.E.
Assistant Office Manager

Stephanie Marie Chavez
CMT Project Professional I

Disclaimer

1. This report (and any attachments) shall not be reproduced except in full without prior written approval of ECS.
2. The information in this report relates only to the activities performed on the report date.
3. Where appropriate, this report includes statements as to compliance with applicable project drawings, and specifications for the activities, performed on this report date.
4. Incomplete or non-conforming work will be reported for future resolution.
5. The results of samples and/or specimens obtained or prepared for subsequent laboratory testing will be presented in separate reports/documents.

TX Registered Engineering Firm # F-8461

ECS Southwest, LLP
431 Isom Road, Suite 114
San Antonio, TX 78216
T 210.528.1430
F 214.483.9684

FIELD REPORT

Project	**Stone Garden - Unit 2A**
Location	**Elmendorf, TX**
Client	**Lennar**
Contractor	**Lennar**

Project No.	**20:1910**
Report No.	**92**
Day & Date	**Friday 9/12/2025**
Weather	**90 °/ Cloudy**
On-Site Time	**3.25**
Lab Time	**0.50**
Travel Time*	**0.50**
Total	**4.25**
Re Obs Time	**0.00**

Remarks **Soil Density Testing**

Trip Charges*	Tolls/Parking*	Mileage*	Time of	Arrival	Departure
35.00				**8:00A**	**11:15A**
Chargeable Items **5000**					

* Travel time and mileage will be billed in accordance with the contract.

Summary of Services Performed (field test data, locations, elevations & depths are estimates) & Individuals Contacted.

The undersigned arrived on-site, as requested to observe the placement and compaction of Base Material.

Locations:
CHALK CAVE, First lift
AZZURRO STONE, First lift.
BASALT GARDEN, First lift
MUDSTONE PLACE, First lift

Please see the attached sketch.

Civil plan page C7.00 Dated 11/14/23 and the Geotechnical Report dated 4/25/22 were reviewed prior to testing.

Utilizing Nuclear Method ASTM D 6938, to check the compaction of Select Granular Fill at the areas and elevations tested, test results met the project requirements of 95% of the corrected maximum dry density and a moisture content of -2% to 3%from optimum, as determined in our laboratory using the TxDOT Test Method TEX-113-E.

Prior to departure, Sammy Ramos and Pablo with V.K Knowlton was informed of the results of the day's testing and observations.

By Paul Anthony White 1800

Field Compaction Summary, D6938

Project No: 20:1910 Project Name: Stone Garden - Unit 2A Date: 9/12/2025

ECS Southwest, LLP

Client: Lennar

Contractor: Lennar

Technician: Paul Anthony White

Test Method D6938			
Nuclear Gauge No. 75821			
Make	Troxler	Density Std	2367
Model	3430P	Moisture Std	729
Ser. No.	78521		

Sample No.	Description	Proctor Method	Uncorrected Max. Density	Uncorrected Optimum Moisture Content
D4S-12	**(GP-GC) POORLY GRADED GRAVEL WITH SILTY CLAY & SAND, Light Tan**	**TEX-113-E**	**137.7**	**4.5**

Test No.	Lot No.	Test Mode	Probe Depth (in.)	Station / Location	Lift / Elev	Sample No.	% Oversize	Corrected Max. Density	Corrected Optimum Moisture Content (%)	Wet Density (pcf)	Dry Density (pcf)	Moisture Content (%)	Percent Comp. (%)	P / F	Comments
1		DT	4	CHALK CAVE, STA 10+50, T1A	LIFT 1	D4S-12	0.00	137.7	4.5	145.1	139.3	4.2	101.2	P	
2		DT	4	CHALK CAVE, STA 12+00, T2A	LIFT 1	D4S-12	0.00	137.7	4.5	138.3	132.4	4.4	96.2	P	
3		DT	4	CHALK CAVE, STA 13+50, T3A	LIFT 1	D4S-12	0.00	137.7	4.5	146.9	140.4	4.6	102.0	P	
4		DT	4	CHALK CAVE, STA 15+50, T4A	LIFT 1	D4S-12	0.00	137.7	4.5	152.0	145.2	4.6	105.4	P	High compaction approved by city inspector
5		DT	4	AZZURRO, STA 13+50 , T1B	LIFT 1	D4S-12	0.00	137.7	4.5	146.5	140.5	4.3	102.0	P	
6		DT	4	AZZURRO, STA 12+0, T2B	LIFT 1	D4S-12	0.00	137.7	4.5	145.7	140.5	3.8	102.0	P	
7		DT	4	AZZURRO, STA 10+50 , T3B	LIFT 1	D4S-12	0.00	137.7	4.5	146.3	139.9	4.6	101.6	P	
8		DT	4	AZZURRO, STA 9+0 , T4B	LIFT 1	D4S-12	0.00	137.7	4.5	144.4	136.7	5.6	99.3	P	
9		DT	4	AZZURRO, STA 7+50, T5B	LIFT 1	D4S-12	0.00	137.7	4.5	146.8	139.7	5.1	101.5	P	
10		DT	4	AZZURRO, STA 6+0, T6B	LIFT 1	D4S-12	0.00	137.7	4.5	144.9	140.0	3.5	101.7	P	

Test Mode: DT = Direct Transmission BS = Back Scatter

WO: 46329

Field Compaction Summary, D6938

Project No: 20:1910 Project Name: Stone Garden - Unit 2A Date: 9/12/2025

ECS Southwest, LLP

Client: Lennar

Contractor: Lennar

Technician: Paul Anthony White

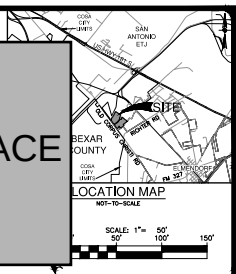
Test Method D6938			
Nuclear Gauge No. 75821			
Make	Troxler	Density Std	2367
Model	3430P	Moisture Std	729
Ser. No.	78521		

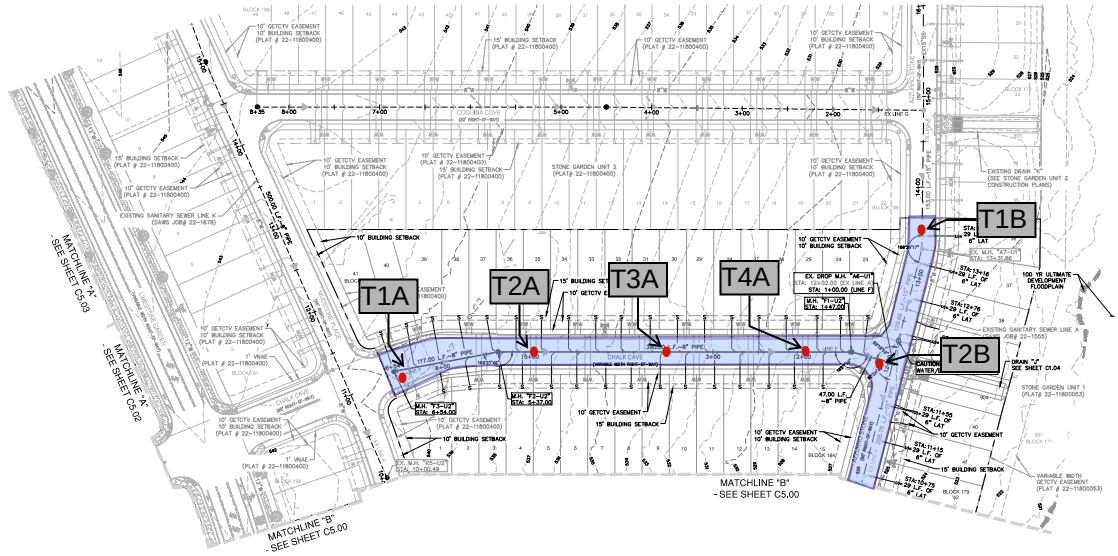
Test No.	Lot No.	Test Mode	Probe Depth (in.)	Station / Location	Lift / Elev	Sample No.	% Oversize	Corrected Max. Density	Corrected Optimum Moisture Content (%)	Wet Density (pcf)	Dry Density (pcf)	Moisture Content (%)	Percent Comp. (%)	P / F	Comments
11		DT	4	AZZURRO, STA 4+50 , T7B	LIFT 1	D4S-12	0.00	137.7	4.5	142.3	136.1	4.5	98.8	P	
12		DT	4	AZZURRO, STA 3+50, T8B	LIFT 1	D4S-12	0.00	137.7	4.5	143.1	136.8	4.6	99.3	P	
13		DT	4	AZZURRO, STA 2+0, T9B	LIFT 1	D4S-12	0.00	137.7	4.5	137.0	131.8	3.9	95.7	P	
14		DT	4	BASALT, STA 3+28, T1C	LIFT 1	D4S-12	0.00	137.7	4.5	140.9	136.0	3.7	98.8	P	
15		DT	4	BASALT, STA 1+50, T2C	LIFT 1	D4S-12	0.00	137.7	4.5	145.1	139.4	4.1	101.2	P	
16		DT	4	MUDSTONE, STA 2+0 , T1D	LIFT 1	D4S-12	0.00	137.7	4.5	139.3	134.2	3.8	97.5	P	
17		DT	4	MUDSTONE, STA 3+50 , T2D	LIFT 1	D4S-12	0.00	137.7	4.5	146.0	138.4	5.5	100.5	P	
18		DT	4	MUDSTONE, STA 5+0, T3D	LIFT 1	D4S-12	0.00	137.7	4.5	141.8	136.1	4.2	98.8	P	
19		DT	4	MUDSTONE, STA 6+50, T4D	LIFT 1	D4S-12	0.00	137.7	4.5	137.6	132.7	3.7	96.4	P	
20		DT	4	MUDSTONE, STA 8+0, T5D	LIFT 1	D4S-12	0.00	137.7	4.5	145.2	137.8	5.4	100.1	P	
21		DT	4	MUDSTONE, STA 9+50, T6D	LIFT 1	D4S-12	0.00	137.7	4.5	142.9	136.4	4.8	99.1	P	

Test Mode: DT = Direct Transmission BS = Back Scatter

WO: 46329

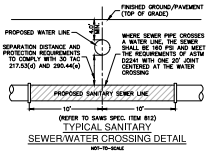
STONE GARDEN UNIT 2 [1910]
BASE, 1ST LIFT, FDT
CHALK CAVE,AZZURRO STONE, BASALT GARDEN,MUDSTONE PLACE
DATE: 9/12/25
TECHNICIAN: PAUL WHITE





SEWER LEGEND

PROJECT LIMITS
EXISTING WATER
EXISTING SEWER
PROPOSED SEWER
PROPOSED WATER
PROPOSED SEWER LATERAL
TE PROPOSED SEWER LATERAL INTO EXISTING SEWER EXTENSION
FINISHED FLOOR ELEVATION FOR SEWER (FF = XXXX.XX)
VEHICULAR NON ACCESS EASEMENT (VNAE)



TYPICAL SANITARY SEWER/WATER CROSSING DETAIL
NOT-TO-SCALE

CAUTION!!

CONTRACTOR SHALL BE REQUIRED TO LOCATE ALL PUBLIC OR PRIVATE UTILITIES INCLUDING BUT NOT LIMITING TO, WATER, SEWER, TELEPHONE AND FIBER OPTIC LINES, SITE LIGHTING ELECTRIC, SECONDARY ELECTRIC, PRIMARY ELECTRICAL DUCTBANKS, LANDSCAPE IRRIGATION FACILITIES, AND GAS LINES. ANY UTILITY CONFLICTS THAT ARISE SHOULD BE COMMUNICATED TO THE ENGINEER IMMEDIATELY AND PRIOR TO CONSTRUCTION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DAMAGE TO EXISTING UTILITIES DURING THE START OF CONSTRUCTION, AND DAMAGE TO EXISTING UTILITIES SHALL BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR AND THE REPAIR SHALL BE AT CONTRACTOR'S SOLE EXPENSE WHETHER THE UTILITY IS SHOWN ON THESE PLANS OR NOT.

FINISHED FLOOR NOTES:

1. THE FINISHED FLOOR ELEVATIONS (FF) REPRESENT THE MINIMUM POSSIBLE FLOOR ELEVATION TO PROVIDE SANITARY SEWER SERVICE TO EACH LOT. ACTUAL FINISHED FLOOR ELEVATIONS FOR EACH LOT ARE TO BE DETERMINED BY THE BUILDER'S SOLE RESPONSIBILITY AND MAY, DUE TO AS-BUILT CONDITIONS FOUND DURING SEWER SERVICES AND ACTUAL LATERAL PLACEMENT, IT IS THE BUILDER'S SOLE RESPONSIBILITY TO DETERMINE ACTUAL FINISHED FLOOR ELEVATIONS FOR EACH LOT PRIOR TO THE START OF HOME FOUNDATION CONSTRUCTION TAKING INTO CONSIDERATION SITE DRAINAGE, STREET ACCESS AND SANITARY SEWER SERVICE ELEVATIONS.
2. THE MINIMUM SANITARY SEWER LATERAL GRADES WERE BIASED UPON THE MINIMUM FINISHED FLOOR ELEVATIONS FOR THE LOTS LOCATED ON THE DOWNHILL SIDES OF THE PROPOSED ROADWAYS.

ROW PERMIT NOTE:

A BEXAR COUNTY PERMIT MUST BE OBTAINED BEFORE WORKING IN BEXAR COUNTY RIGHTS-OF-WAY.

TRENCH EXCAVATION SAFETY PROTECTION:

CONTRACTOR AND/ OR CONTRACTOR'S INDEPENDENTLY RETAINED EMPLOYEE OR STRUCTURAL DESIGN / GEOTECHNICAL / SAFETY EQUIPMENT CONSULTANT, IF ANY, SHALL REVIEW THESE PLANS AND ANY AVAILABLE GEOTECHNICAL INFORMATION AND THE ANTICIPATED INSTALLATION SITES WITHIN THE PROJECT WORK AREA IN ORDER TO IMPLEMENT CONTRACTOR'S TRENCH EXCAVATION SAFETY PROTECTION SYSTEMS, PROGRAMS AND /OR PROCEDURES FOR THE PROJECT DESCRIBED IN THE CONTRACT DOCUMENTS. THE CONTRACTOR'S IMPLEMENTATION OF THESE SYSTEMS, PROGRAMS AND/OR PROCEDURES SHALL PROVIDE FOR ADEQUATE TRENCH EXCAVATION SAFETY PROTECTION THAT COMPLY WITH AS A MINIMUM, OSHA STANDARDS FOR TRENCH EXCAVATIONS. SPECIFICALLY, CONTRACTOR AND/OR CONTRACTOR'S INDEPENDENTLY RETAINED EMPLOYEE OR SAFETY CONSULTANT SHALL DESIGN AND IMPLEMENT TRENCH SAFETY SYSTEMS IN ACCORDANCE WITH OSHA STANDARDS GOVERNING THE PRESENCE AND ACTIVITIES OF INDIVIDUALS WORKING IN AND AROUND TRENCH EXCAVATION.

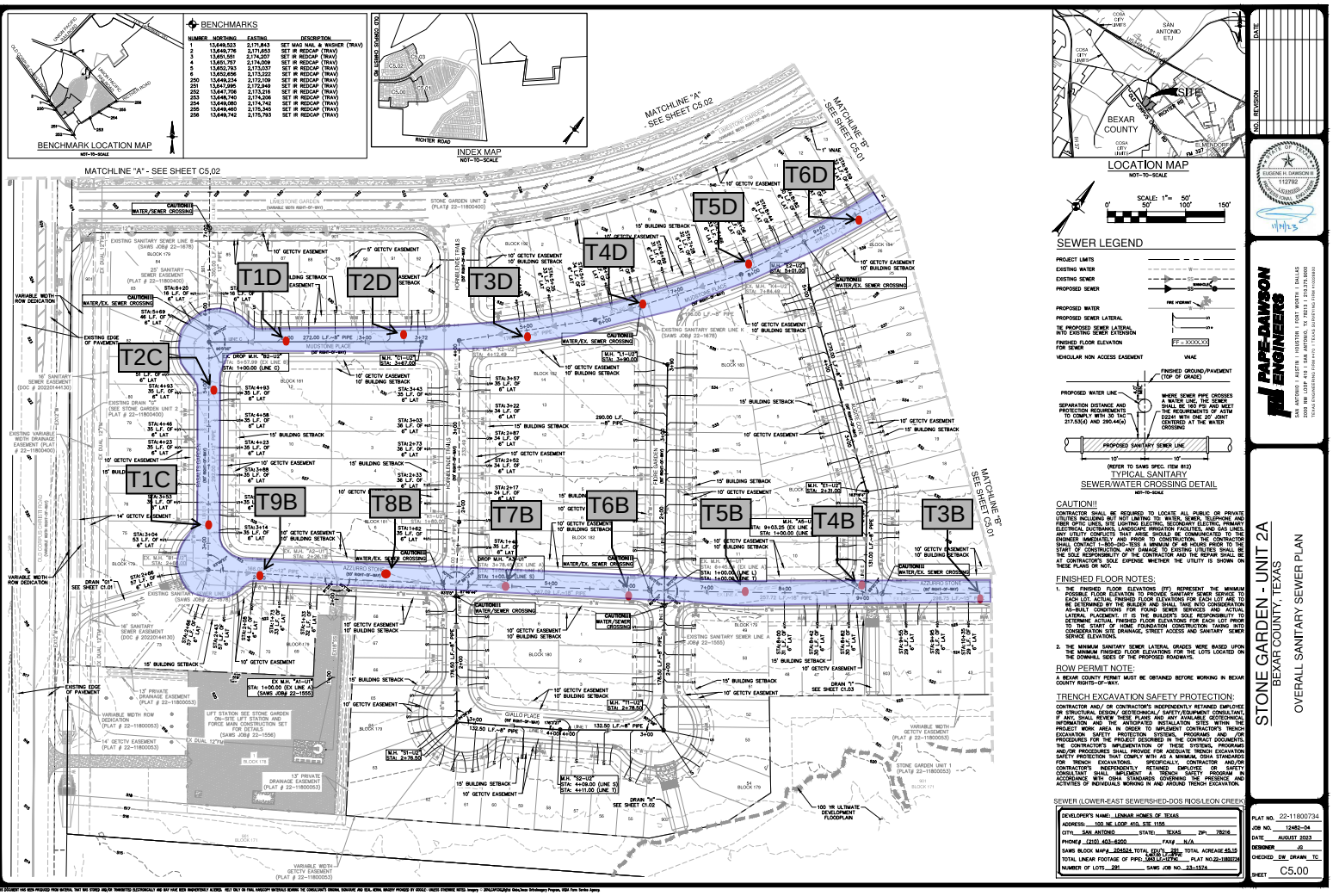
SEWER (LOWER-EAST SEWERSHED-DOS RIOS/LEON CREEK)

DEVELOPER'S NAME: LENNAR HOMES OF TEXAS
ADDRESS: 100 NE LOOP 410, STE 1155
CITY: SAN ANTONIO STATE: TEXAS ZIP: 78216
PHONE# (210) 403-8200 FAX# N/A
SAWS BLOCK MAP#: 204524 TOTAL EDU'S: 291 TOTAL ACREAGE: 45.15
TOTAL LINEAR FOOTAGE OF PIPE: 7,065 LF-12"PVC PLAT NO.22-11800734
NUMBER OF LOTS: 291 SAWS JOB NO. 23-1574

FAPE-DAWSON ENGINEERS
SAN ANTONIO / AUSTIN / HOUSTON / FORT WORTH / DALLAS
2000 NW LOOP 410 | SAN ANTONIO, TX 78213 | 210.375.9000
TEXAS BOARD/BUREAU # 2000 | TEXAS SURVEY FIRM # 10028800

STONE GARDEN - UNIT 2A
BEXAR COUNTY, TEXAS
OVERALL SANITARY SEWER PLAN

PLAT NO. 22-11800734
JOB NO. 12462-04
DATE AUGUST 2023
DESIGNER JG
CHECKED DW DRAWN TC
SHEET C5.01


BENCHMARKS
NUMBER NORTHING EASTING DESCRIPTION
1 13,649,533 2,171,843 SET MAG NAIL & WASHER (TRAV)
2 13,649,776 2,171,653 SET IR REDCAP (TRAV)
3 13,651,551 2,174,207 SET IR REDCAP (TRAV)
4 13,651,757 2,174,009 SET IR REDCAP (TRAV)
5 13,652,284 2,173,537 SET IR REDCAP (TRAV)
6 13,652,782 2,173,037 SET IR REDCAP (TRAV)
250 13,649,234 2,172,109 SET IR REDCAP (TRAV)
251 13,647,995 2,172,949 SET IR REDCAP (TRAV)
252 13,647,706 2,173,216 SET IR REDCAP (TRAV)
253 13,648,740 2,174,206 SET IR REDCAP (TRAV)
254 13,649,080 2,174,742 SET IR REDCAP (TRAV)
255 13,649,460 2,175,345 SET IR REDCAP (TRAV)
256 13,649,742 2,175,793 SET IR REDCAP (TRAV)
BENCHMARK LOCATION MAP
NOT-TO-SCALE
INDEX MAP
NOT-TO-SCALE
MATCHLINE "A" - SEE SHEET C5.02
MATCHLINE "A" - SEE SHEET C5.02
MATCHLINE "B" - SEE SHEET C5.01
MATCHLINE "B" - SEE SHEET C5.01
T1C
T1D
T2C
T2D
T3B
T3D
T4B
T4D
T5B
T5D
T6B
T6D
T7B
T8B
T9B
LOCATION MAP
NOT-TO-SCALE
SCALE: 1" = 50'
SEWER LEGEND
PROJECT LIMITS
EXISTING WATER
EXISTING SEWER
PROPOSED SEWER
PROPOSED WATER
PROPOSED SEWER LATERAL
TIE PROPOSED SEWER LATERAL INTO EXISTING SEWER EXTENSION
FINISHED FLOOR ELEVATION FOR SEWER
VEHICULAR NON ACCESS EASEMENT
FINISHED GROUND/PAVEMENT (TOP OF GRADE)
PROPOSED WATER LINE
SEPARATION DISTANCE AND PROTECTION REQUIREMENTS TO COMPLY WITH 30 TAC 217.53(d) AND 290.44(e)
WHERE SEWER PIPE CROSSES A WATER LINE, THE SEWER PIPE SHALL BE PER SHEET THE AS SUPPLEMENTS OF ASTM D2241 WITH ONE 20' JOINT CENTERED AT THE WATER CROSSING
PROPOSED SANITARY SEWER LINE
(REFER TO SAWS SPEC. ITEM 812)
TYPICAL SANITARY SEWER/WATER CROSSING DETAIL
NOT-TO-SCALE
CAUTION!!
CONTRACTOR SHALL BE REQUIRED TO LOCATE ALL PUBLIC OR PRIVATE UTILITIES INCLUDING BUT NOT LIMITING TO, WATER, SEWER, TELEPHONE AND FIBER OPTIC LINES, SITE LIGHTING ELECTRIC, SECONDARY ELECTRIC, PRIMARY ELECTRICAL, DUCTBANKS, LANDSCAPE IRRIGATION FACILITIES, AND GAS LINES. ANY UTILITY CONFLICTS THAT ARISE SHOULD BE COMMUNICATED TO THE ENGINEER IMMEDIATELY AND PRIOR TO CONSTRUCTION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DAMAGE TO EXISTING UTILITIES DURING START OF CONSTRUCTION, AND DAMAGE TO EXISTING UTILITIES SHALL BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR AND THE REPAIR SHALL BE AT CONTRACTOR'S SOLE EXPENSE WHETHER THE UTILITY IS SHOWN ON THESE PLANS OR NOT.
FINISHED FLOOR NOTES:
1. THE FINISHED FLOOR ELEVATIONS (FF) REPRESENT THE MINIMUM POSSIBLE FLOOR ELEVATION TO PROVIDE SANITARY SEWER SERVICE TO EACH LOT. ACTUAL FINISHED FLOOR ELEVATIONS FOR EACH LOT ARE TO BE DETERMINED BY THE BUILDER'S ENGINEER AND SHALL BE BASED ON AS-BUILT CONDITIONS AND FOUND SEWER SERVICES AND ACTUAL LATERAL PLACEMENT. IT IS THE BUILDER'S SOLE RESPONSIBILITY TO DETERMINE ACTUAL FINISHED FLOOR ELEVATIONS FOR EACH LOT PRIOR TO THE START OF HOME FOUNDATION CONSTRUCTION TAKING INTO CONSIDERATION SITE DRAINAGE, STREET ACCESS AND SANITARY SEWER SERVICE ELEVATIONS.
2. THE MINIMUM SANITARY SEWER LATERAL GRADES WERE BASED UPON THE MINIMUM FINISHED FLOOR ELEVATIONS FOR THE LOTS LOCATED ON THE DOWNHILL SIDES OF THE PROPOSED ROADWAYS.
ROW PERMIT NOTE:
A BEXAR COUNTY PERMIT MUST BE OBTAINED BEFORE WORKING IN BEXAR COUNTY RIGHTS-OF-WAY.
TRENCH EXCAVATION SAFETY PROTECTION:
CONTRACTOR AND/ OR CONTRACTOR'S INDEPENDENTLY RETAINED EMPLOYEE OR STRUCTURAL DESIGN / GEOTECHNICAL / SAFETY EQUIPMENT CONSULTANT, IF ANY, SHALL REVIEW THESE PLANS AND ANY AVAILABLE GEOTECHNICAL INFORMATION AND THE ANTICIPATED INSTALLATION SITES WITHIN THE PROJECT WORK AREA IN ORDER TO IMPLEMENT CONTRACTOR'S TRENCH EXCAVATION SAFETY PROTECTION SYSTEMS, PROGRAMS AND /OR PROCEDURES FOR THE PROJECT DESCRIBED IN THE CONTRACT DOCUMENTS. THE CONTRACTOR'S IMPLEMENTATION OF THESE SYSTEMS, PROGRAMS AND/OR PROCEDURES SHALL PROVIDE FOR ADEQUATE TRENCH EXCAVATION SAFETY PROTECTION THAT COMPLY WITH AS A MINIMUM, OSHA STANDARDS FOR TRENCH EXCAVATIONS. SPECIFICALLY, CONTRACTOR AND/OR CONTRACTOR'S INDEPENDENTLY RETAINED EMPLOYEE OR SAFETY CONSULTANT SHALL DESIGN, CONSTRUCT AND IMPLEMENT SUCH PROGRAMS IN ACCORDANCE WITH OSHA STANDARDS GOVERNING THE PRESENCE AND ACTIVITIES OF INDIVIDUALS WORKING IN AND AROUND TRENCH EXCAVATION.
SEWER (LOWER-EAST SEWERSHED-DOS RIOS/LEON CREEK)
DEVELOPER'S NAME: LENNAR HOMES OF TEXAS
ADDRESS: 100 NE LOOP 410, STE 1155
CITY: SAN ANTONIO STATE: TEXAS ZIP: 78216
PHONE # (210) 403-8200 FAX # N/A
SAWS BLOCK MAP # 204524, TOTAL EDU'S: 291, TOTAL ACREAGE 45.15
TOTAL LINEAR FOOTAGE OF PIPE: 7,065 LF+/-PVC PLAT NO. 22-11800734
NUMBER OF LOTS: 291 SAWS JOB NO. 23-1574
SHEET C5.00
PAPE-DAWSON ENGINEERS
SAN ANTONIO | AUSTIN | HOUSTON | FORT WORTH | DALLAS
2000 NW LOOP 410 | SAN ANTONIO, TX 78213 | 210.375.9000
TBPE FIRM REGISTRATION #470 | TBPLS SURVEY FIRM #100288-00
STONE GARDEN - UNIT 2A
BEXAR COUNTY, TEXAS
OVERALL SANITARY SEWER PLAN
DATE
NO. REVISION

Attachments

Chalk cave

Figure 1

Azzurro Stone

Figure 2

Attachments

Azzurro Cont.

Figure 3

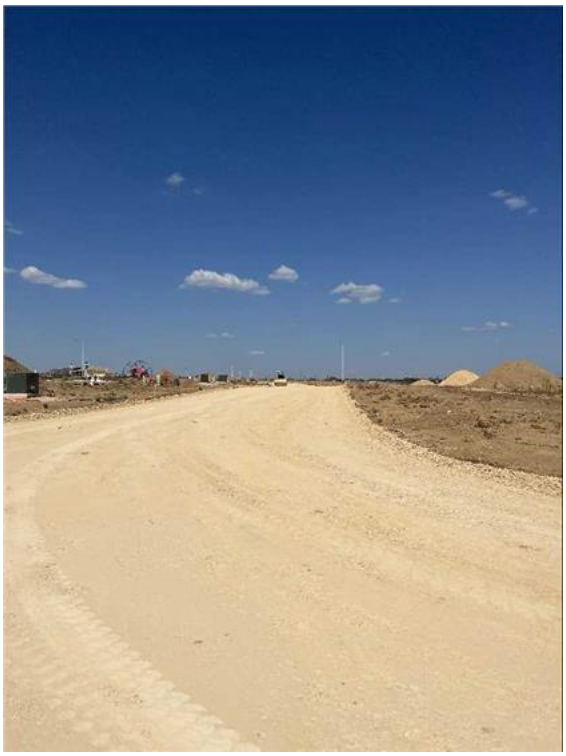
Azzurro Cont.

Figure 4

Attachments

Basalt Garden

Figure 5



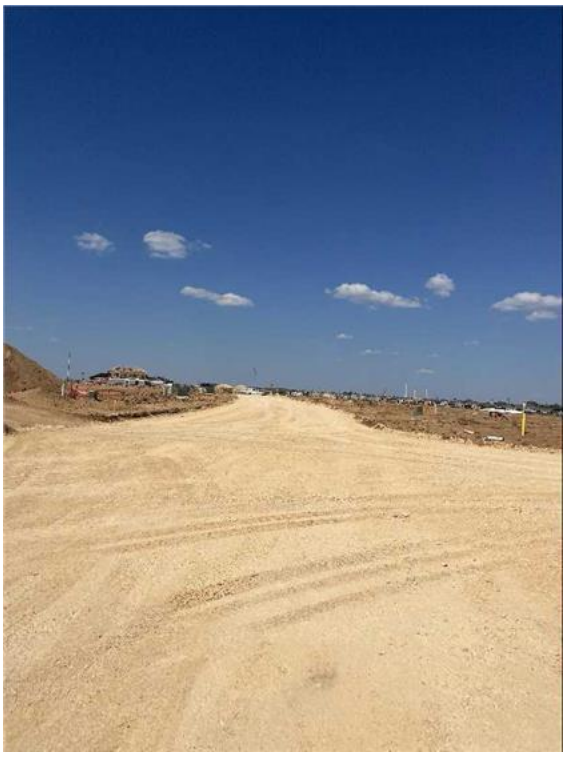
Mudstone Place

Figure 6

Attachments

Mudstone Place Cont.

Figure 7



Mudstone Place Cont.

Figure 8

Attachments

Compaction Method

Figure 9

TX Registered Firm # F-8461

ECS Southwest, LLP
431 Isom Road, Suite 114
San Antonio, TX 78216
T 210.528.1430
F 214.483.9684

LETTER OF TRANSMITTAL

September 16, 2025
Lennar
100 NE Loop 410 Suite 1155
San Antonio, TX 78216

ATTN: Mr. Nathan Nowell

RE: **Stone Garden - Unit 2A**
ECS Job # **20:1910**

Permits:
Location: **14395 Old Corpus Christi Road**
Elmendorf, TX 78112

X Field Reports **X** For your use **X** As requested

CC: City of San Antonio - Development Services Department - Juan Ramirez
Lennar - Rogelio "Roy" Olivarez, Jr.
V.K. Knowlton Construction - Sammy Ramos

ENCL: Field Report # 93 9/15/2025 Soil Density Testing

Adam James Heiman, P.E.
Assistant Office Manager

Stephanie Marie Chavez
CMT Project Professional I

Disclaimer

1. This report (and any attachments) shall not be reproduced except in full without prior written approval of ECS.
2. The information in this report relates only to the activities performed on the report date.
3. Where appropriate, this report includes statements as to compliance with applicable project drawings, and specifications for the activities, performed on this report date.
4. Incomplete or non-conforming work will be reported for future resolution.
5. The results of samples and/or specimens obtained or prepared for subsequent laboratory testing will be presented in separate reports/documents.

TX Registered Engineering Firm # F-8461

ECS Southwest, LLP
431 Isom Road, Suite 114
San Antonio, TX 78216
T 210.528.1430
F 214.483.9684

FIELD REPORT

Project	**Stone Garden - Unit 2A**
Location	**Elmendorf, TX**
Client	**Lennar**
Contractor	**Lennar**

Project No.	**20:1910**
Report No.	**93**
Day & Date	**Monday 9/15/2025**
Weather	**78 °/ Clear**
On-Site Time	**1.25**
Lab Time	**1.00**
Travel Time*	**0.50**
Total	**2.75**
Re Obs Time	**0.00**

Remarks **Soil Density Testing**

Trip Charges*	Tolls/Parking*	Mileage*	Time of	Arrival	Departure
35.00				**8:30A**	**9:45A**
Chargeable Items **5000**					

* Travel time and mileage will be billed in accordance with the contract.

Summary of Services Performed (field test data, locations, elevations & depths are estimates) & Individuals Contacted.

The undersigned arrived on-site, as requested to observe the placement and compaction of A2 Base material.

Location:
Hornblende Trails
Giallo Place
Fiore Garden

Please see the attached sketch.

Civil plan page C2.16 dated 09/11/2023 and the Geotechnical Report dated 04/25/2022 were reviewed prior to testing.

Utilizing Nuclear Method ASTM D 6938, to check the compaction of A2 Base material at the areas and elevations tested, test results met the project requirements of 95% of the corrected maximum dry density and a moisture content of -2% to +3% from optimum, as determined in our laboratory using the Standard Test Method TEX-113-E.

Exceptions noted: None.

Prior to departure, Sammy Ramos with VK Knowlton was informed of the day's testing and observation results.

By Victor M Muniz 1800

Field Compaction Summary, D6938

Project No: 20:1910 Project Name: Stone Garden - Unit 2A Date: 9/15/2025

ECS Southwest, LLP

Client: Lennar

Contractor: Lennar

Technician: Victor M Muniz

Test Method D6938			
Nuclear Gauge No. 26193			
Make	Troxler	Density Std	1497
Model	3430P	Moisture Std	664
Ser. No.	26193		

Sample No.	Description	Proctor Method	Uncorrected Max. Density	Uncorrected Optimum Moisture Content
D4S-12	**(GP-GC) POORLY GRADED GRAVEL WOTH SILTY CLAY AND SAND, Light Tan**	**Proctor Method TEX 113E**	**137.7**	**4.5**

Test No.	Lot No.	Test Mode	Probe Depth (in.)	Station / Location	Lift / Elev	Sample No.	% Oversize	Corrected Max. Density	Corrected Optimum Moisture Content (%)	Wet Density (pcf)	Dry Density (pcf)	Moisture Content (%)	Percent Comp. (%)	P / F	Comments
1		DT	6	Hornblende Trails, STA 2+00	1st	D4S-12	0.00	137.7	4.5	140.2	135.3	3.6	98.3	P	
2		DT	6	Hornblende Trails, STA 3+50	1st	D4S-12	0.00	137.7	4.5	142.5	137.7	3.5	100.0	P	
3		DT	6	Hornblende Trails, STA 5+00	1st	D4S-12	0.00	137.7	4.5	141.0	137.2	2.8	99.6	P	
4		DT	6	Hornblende Trails, STA 6+50	1st	D4S-12	0.00	137.7	4.5	136.6	132.0	3.5	95.9	P	
5		DT	6	Giallo Place, STA 1+50	1st	D4S-12	0.00	137.7	4.5	147.8	143.0	3.4	103.8	P	
6		DT	6	Giallo Place, STA 3+00	1st	D4S-12	0.00	137.7	4.5	148.4	144.4	2.8	104.9	P	
7		DT	6	Fiore Garden, STA 5+50	1st	D4S-12	0.00	137.7	4.5	142.2	138.6	2.6	100.7	P	
8		DT	6	Fiore Garden, STA 4+00	1st	D4S-12	0.00	137.7	4.5	146.4	141.3	3.6	102.6	P	
9		DT	6	Fiore Garden, STA 2+50	1st	D4S-12	0.00	137.7	4.5	134.6	130.8	2.9	95.0	P	
10		DT	6	Fiore Garden, STA 1+00	1st	D4S-12	0.00	137.7	4.5	144.7	139.7	3.5	101.5	P	

Test Mode: DT = Direct Transmission BS = Back Scatter

WO: 46330

Stone Garden - Unit 2A
In - Place Density Testing Observation
09/15/2025
Technician: V. Muniz

INDEX MAP
NOT-TO-SCALE

MATCHLINE "A" - SEE SHEET C3.02

MATCHLINE "B" - SEE SHEET C3.01

T1 STA 2+00
T2 STA 3+50
T3 STA 5+00
T4 STA 6+50
T5 STA 1+50
T6 STA 3+00
T7 STA 5+50
T8 STA 4+00
T9 STA 2+50
T10 STA 1+00

HEADER CURB & BARRICADE POST DETAIL
NOT-TO-SCALE

OBJECT MARKER TYPE 4
NOT-TO-SCALE

LOCATION MAP
NOT-TO-SCALE

SCALE: 1"= 50'
0' 50' 100' 150'

SYMBOL		ITEM NUMBER
	UNIT BOUNDARY	
	CURB INLET	
	PROPOSED DRIVEWAY	
	SIDEWALK (HOMEBUILDER RESPONSIBILITY)	
	SIDEWALK (DEVELOPER'S RESPONSIBILITY)	
VNAE	TYPE II BLUE RAISED PAVEMENT MARKERS – NO SEPARATE PAY ITEM (N.T.S.) VEHICULAR NON ACCESS EASEMENT	
	END OF ROAD MARKER OM4-3	
	HEADER CURB W/ BARRICADE POSTS	
(A)	YELLOW DOUBLE 6" SOLID – THERMOPLASTIC WITH TYPE II A-A @ 20' (REFL) PAVEMENT MARKERS	
Street Name	STREET SIGN	531.57
DEAD END	W14-1AR	
STOP	R1-1 (30"X30")	531.3

BEXAR COUNTY ROW NOTES:

A BEXAR COUNTY PERMIT MUST BE OBTAINED BEFORE WORKING IN BEXAR COUNTY ROW. CONTRACTOR SHALL COORDINATE A TRAFFIC CONTROL PLAN FOR ALL WORK WITHIN THE ROW. ADDITIONAL WARNING SIGNS MAY BE RECOMMENDED BY THE ENGINEER ONCE THE ROADWAYS ARE CONSTRUCTED.

DRIVEWAY NOTE:

DRIVEWAYS SHOWN ON THIS PLAN ARE FOR THE SOLE PURPOSE OF INDICATING A POTENTIAL CONFLICT WITH CURB RAMP, DRAINAGE INFRASTRUCTURE, OR OTHER CONFLICT. DRIVEWAY LOCATION IS SUBJECT TO CHANGE BASED ON HOME SELECTION AND FINAL LOT DESIGN.

TRENCH EXCAVATION SAFETY PROTECTION:

CONTRACTOR AND/ OR CONTRACTOR'S INDEPENDENTLY RETAINED EMPLOYEE OR STRUCTURAL DESIGN/ GEOTECHNICAL/ SAFETY/EQUIPMENT CONSULTANT, IF ANY, SHALL REVIEW THESE PLANS AND ANY AVAILABLE GEOTECHNICAL INFORMATION AND THE ANTICIPATED INSTALLATION SITES WITHIN THE PROJECT WORK AREA IN ORDER TO IMPLEMENT CONTRACTOR'S TRENCH EXCAVATION SAFETY PROTECTION SYSTEMS, PROGRAMS AND /OR PROCEDURES FOR THE PROJECT DESCRIBED IN THE CONTRACT DOCUMENTS. THE CONTRACTOR'S IMPLEMENTATION OF THESE SYSTEMS, PROGRAMS AND/OR PROCEDURES SHALL PROVIDE FOR ADEQUATE TRENCH EXCAVATION SAFETY PROTECTION THAT COMPLY WITH AS A MINIMUM, OSHA STANDARDS FOR TRENCH EXCAVATIONS. SPECIFICALLY, CONTRACTOR AND/OR CONTRACTOR'S INDEPENDENTLY RETAINED EMPLOYEE OR SAFETY CONSULTANT SHALL IMPLEMENT A TRENCH SAFETY PROGRAM IN ACCORDANCE WITH OSHA STANDARDS GOVERNING THE PRESENCE AND ACTIVITIES OF INDIVIDUALS WORKING IN AND AROUND TRENCH EXCAVATION.

NO. | REVISION | DATE

STATE OF TEXAS
EUGENE H. DAWSON III
112792
LICENSED
PROFESSIONAL ENGINEER
12/11/2023

PAPE-DAWSON ENGINEERS
SAN ANTONIO | AUSTIN | HOUSTON | FORT WORTH | DALLAS
2000 NW LOOP 410 | SAN ANTONIO, TX 78213 | 210.375.9000
TEXAS ENGINEERING FIRM #470 | TEXAS SURVEYING FIRM #10028800

STONE GARDEN - UNIT 2A
BEXAR COUNTY, TEXAS
OVERALL SIGNAGE PLAN

PLAT NO. 22-11800734
JOB NO. 12482-04
DATE AUGUST 2023
DESIGNER JG
CHECKED DW DRAWN TC
SHEET C3.00

Date: Dec 11, 2023, 2:34pm User ID: bkyle
File: P:\124\82\04\Unit-2A\Civil\SG124820 4-U2A.dwg

Attachments

Equipment used for compaction of soil

Figure 1

FDT area observed at Hornblende Trails

Figure 2

Attachments

FDT area observed at Giallo Place

Figure 3

FDT area observed at Fiore Garden

Figure 4

TX Registered Firm # F-8461

ECS Southwest, LLP
431 Isom Road, Suite 114
San Antonio, TX 78216
T 210.528.1430
F 214.483.9684

LETTER OF TRANSMITTAL

September 23, 2025
Lennar
100 NE Loop 410 Suite 1155
San Antonio, TX 78216

ATTN: Mr. Nathan Nowell

RE: **Stone Garden - Unit 2A**
ECS Job # **20:1910**

Permits:
Location: **14395 Old Corpus Christi Road**
Elmendorf, TX 78112

X Field Reports **X** For your use **X** As requested

CC: City of San Antonio - Development Services Department - Juan Ramirez
Lennar - Rogelio "Roy" Olivarez, Jr.
V.K. Knowlton Construction - Sammy Ramos

ENCL: Field Report # 94 9/22/2025 Soil Density Testing

Adam James Heiman, P.E.
Assistant Office Manager

Stephanie Marie Chavez
CMT Project Professional I

TX Registered Engineering Firm # F-8461

ECS Southwest, LLP
431 Isom Road, Suite 114
San Antonio, TX 78216
T 210.528.1430
F 214.483.9684

FIELD REPORT

Project	**Stone Garden - Unit 2A**
Location	**Elmendorf, TX**
Client	**Lennar**
Contractor	**Lennar**

Project No.	**20:1910**
Report No.	**94**
Day & Date	**Monday 9/22/2025**
Weather	**95 °/ Partly Cloudy**
On-Site Time	**3.50**
Lab Time	**0.25**
Travel Time*	**0.75**
Total	**4.50**
Re Obs Time	**0.00**

Remarks **Soil Density Testing**

Trip Charges*	Tolls/Parking*	Mileage*	Time of	Arrival	Departure
35.00					
Chargeable Items **5000**				**1:30P**	**5:00P**

* Travel time and mileage will be billed in accordance with the contract.

Summary of Services Performed (field test data, locations, elevations & depths are estimates) & Individuals Contacted.

The undersigned arrived on-site, as requested to observe the placement and compaction of BASE MATERIAL.

Location:
CHALK CAVE
BASALT GARDEN

Please see the attached sketch.

Civil plan page C7.00 Dated 11/14/23 and the Geotechnical Report dated 4/25/22 were reviewed prior to testing.

Utilizing Nuclear Method ASTM D 6938, to check the compaction of base material at the areas and elevations tested, test results met the project requirements of 95% of the corrected maximum dry density and a moisture content of -2% to 3%from optimum, as determined in our laboratory using the TxDOT Test Method TEX-113-E.

Prior to departure, Sammy Ramos with V.K Knowlton was informed of the results of the day's testing and observations.

By Paul Anthony White 1800

Field Compaction Summary, D6938

Project No: 20:1910 Project Name: Stone Garden - Unit 2A Date: 9/22/2025

ECS Southwest, LLP

Client: Lennar

Contractor: Lennar

Technician: Paul Anthony White

Test Method D6938			
Nuclear Gauge No. 26193			
Make	Troxler	Density Std	1474
Model	3430P	Moisture Std	658
Ser. No.	26193		

Sample No.	Description	Proctor Method	Uncorrected Max. Density	Uncorrected Optimum Moisture Content
D4S-12	**(GP-GC) POORLY GRADED GRAVEL WITH SILTY CLAY & SAND, Light Tan**	**TEX-113-E**	**137.7**	**4.5**

Test No.	Lot No.	Test Mode	Probe Depth (in.)	Station / Location	Lift / Elev	Sample No.	% Oversize	Corrected Max. Density	Corrected Optimum Moisture Content (%)	Wet Density (pcf)	Dry Density (pcf)	Moisture Content (%)	Percent Comp. (%)	P / F	Comments
1		DT	6	CHALK CAVE, STA 1+50, T1A	FINAL LIFT	D4S-12	0.00	137.7	4.5	150.3	144.5	4.1	104.9	P	
2		DT	6	CHALK CAVE, STA 3+00, T2A	FINAL LIFT	D4S-12	0.00	137.7	4.5	145.1	140.7	3.1	102.2	P	
3		DT	6	CHALK CAVE, STA 4+50, T3A	FINAL LIFT	D4S-12	0.00	137.7	4.5	146.4	141.0	3.9	102.4	P	
4		DT	6	CHALK CAVE, STA 6+00,T4A	FINAL LIFT	D4S-12	0.00	137.7	4.5	149.6	145.0	3.2	105.3	P	
5		DT	6	CHALK CAVE, STA 6+75, T5A	FINAL LIFT	D4S-12	0.00	137.7	4.5	137.4	133.5	2.9	96.9	P	
6		DT	6	GRANITE GARDEN, STA 12+50, T1B	FINAL LIFT	D4S-12	0.00	137.7	4.5	140.0	135.6	3.3	98.5	P	
7		DT	6	GRANITE GARDEN, STA 11+00, T2B	FINAL LIFT	D4S-12	0.00	137.7	4.5	147.3	142.3	3.5	103.3	P	
8		DT	6	GRANITE GARDEN, STA 9+50, T3B	FINAL LIFT	D4S-12	0.00	137.7	4.5	150.8	144.0	4.7	104.6	P	
9		DT	6	GRANITE GARDEN, STA 8+00, T4B	FINAL LIFT	D4S-12	0.00	137.7	4.5	143.6	137.2	4.7	99.6	P	
10		DT	6	GRANITE GARDEN, STA 6+50, T5B	FINAL LIFT	D4S-12	0.00	137.7	4.5	139.5	134.9	3.5	98.0	P	

Test Mode: DT = Direct Transmission BS = Back Scatter

WO: 46558

Field Compaction Summary, D6938

Project No: 20:1910 Project Name: Stone Garden - Unit 2A Date: 9/22/2025

ECS Southwest, LLP

Client: Lennar

Contractor: Lennar

Technician: Paul Anthony White

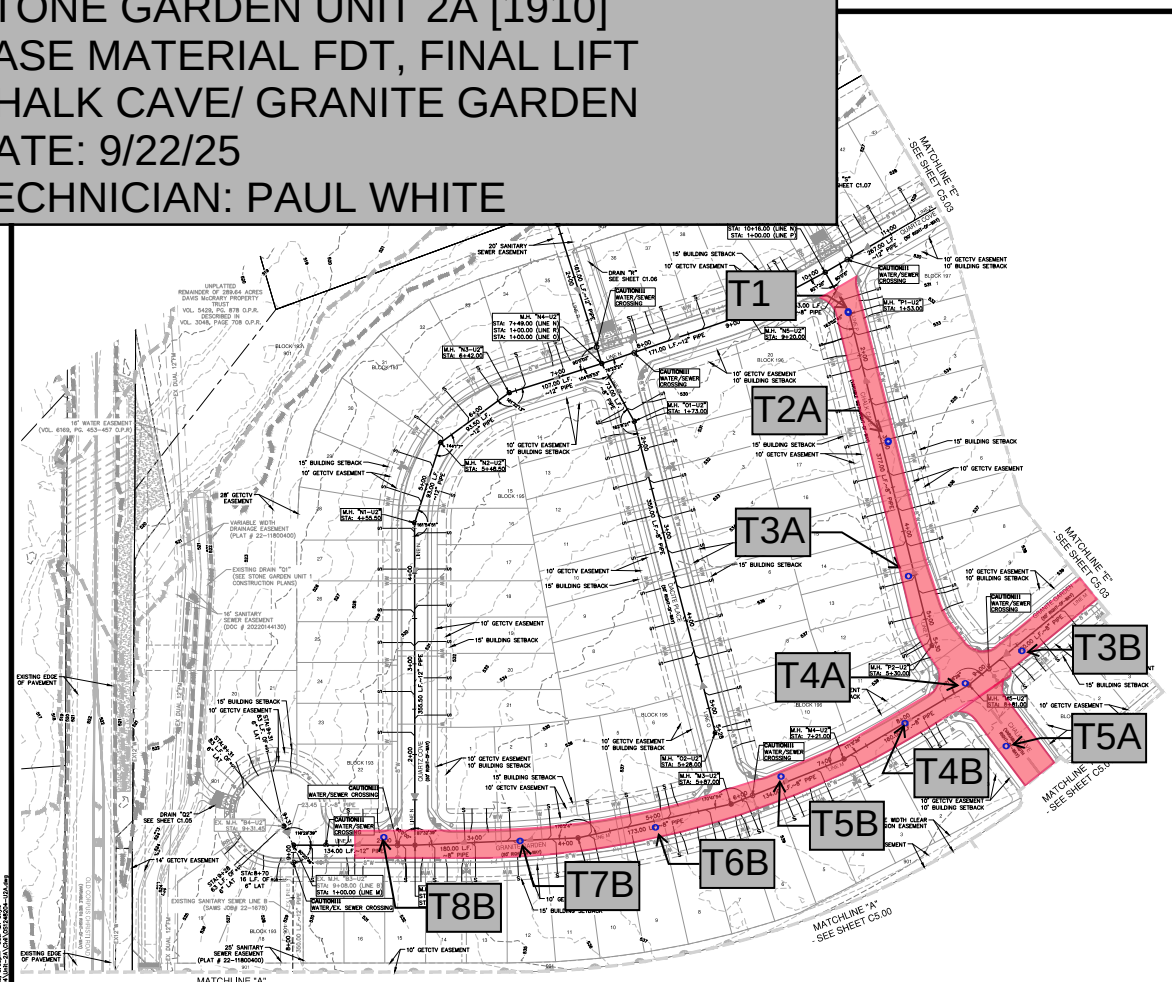
Test Method D6938			
Nuclear Gauge No. 26193			
Make	Troxler	Density Std	1474
Model	3430P	Moisture Std	658
Ser. No.	26193		

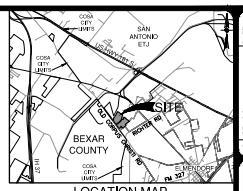
Test No.	Lot No.	Test Mode	Probe Depth (in.)	Station / Location	Lift / Elev	Sample No.	% Oversize	Corrected Max. Density	Corrected Optimum Moisture Content (%)	Wet Density (pcf)	Dry Density (pcf)	Moisture Content (%)	Percent Comp. (%)	P / F	Comments
11		DT	6	GRANITE GARDEN, STA 5+00, T6B	FINAL LIFT	D4S-12	0.00	137.7	4.5	138.3	134.6	2.8	97.7	P	
12		DT	6	GRANITE GARDEN, STA 3+50, T7B	FINAL LIFT	D4S-12	0.00	137.7	4.5	144.5	140.6	2.8	102.1	P	
13		DT	6	GRANITE GARDEN, STA 2+00, T8B	FINAL LIFT	D4S-12	0.00	137.7	4.5	140.4	135.3	3.8	98.3	P	

Test Mode: DT = Direct Transmission BS = Back Scatter

WO: 46558

STONE GARDEN UNIT 2A [1910]
BASE MATERIAL FDT, FINAL LIFT
CHALK CAVE/ GRANITE GARDEN
DATE: 9/22/25
TECHNICIAN: PAUL WHITE



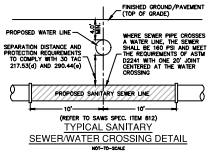


LOCATION MAP
NOT-TO-SCALE

SCALE: 1" = 50'
0' 50' 100' 150'

SEWER LEGEND

PROJECT LIMITS
EXISTING WATER
EXISTING SEWER
PROPOSED SEWER
PROPOSED WATER
PROPOSED SEWER LATERAL
TE PROPOSED SEWER LATERAL INTO EXISTING SEWER EXTENSION
FINISHED FLOOR ELEVATION FOR SEWER
VEHICULAR NON ACCESS EASEMENT



TYPICAL SANITARY SEWER/WATER CROSSING DETAIL
NOT-TO-SCALE

CAUTION!!

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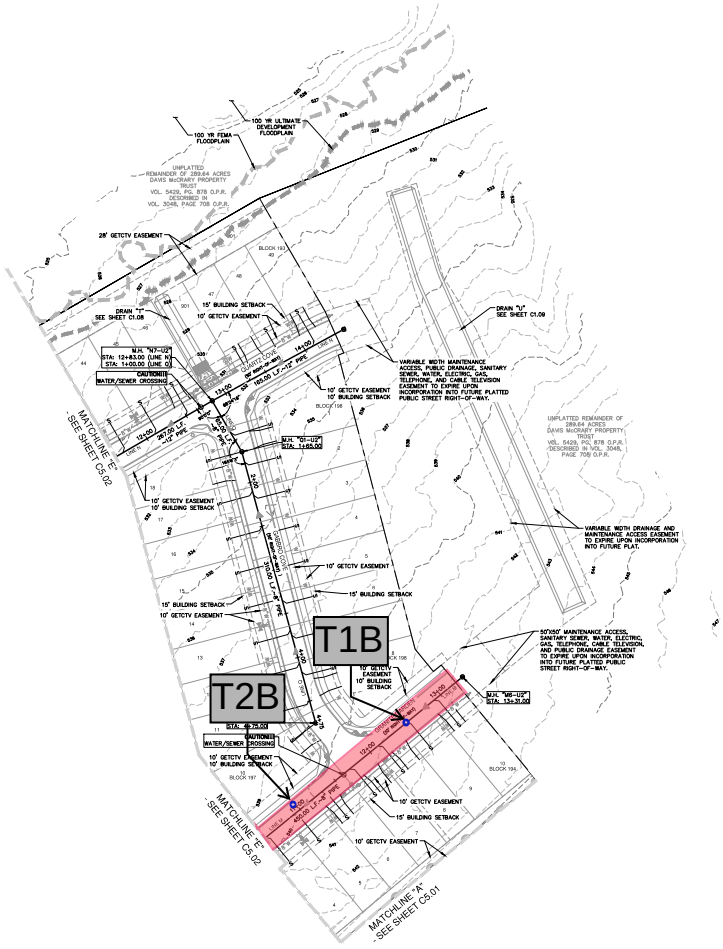
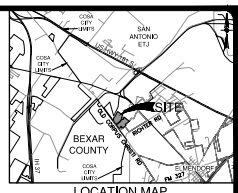
SEWER (LOWER-EAST SEWERSHED-DOS RIOS/LEON CREEK)

DEVELOPER'S NAME: LENNAR HOMES OF TEXAS
ADDRESS: 100 NE LOOP 410, STE 1155
CITY: SAN ANTONIO STATE: TEXAS ZIP: 78216
PHONE # (210) 403-8200 FAX # N/A
SAWS BLOCK MAP #: 204524 TOTAL EDU'S: 291 TOTAL ACREAGE: 45.15
TOTAL LINEAR FOOTAGE OF PIPE: 7,065 LF-12"PVC PLAT NO.22-11800734
NUMBER OF LOTS: 291 SAWS JOB NO. 23-1574

STONE GARDEN - UNIT 2A
BEXAR COUNTY, TEXAS
OVERALL SANITARY SEWER PLAN

PLAT NO. 22-11800734
JOB NO. 12462-04
DATE AUGUST 2023
DESIGNER JG
CHECKED DW DRAWN TC
SHEET C5.02



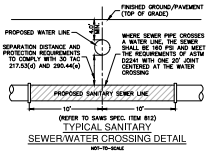


LOCATION MAP
NOT-TO-SCALE

SCALE: 1" = 50'
0' 50' 100' 150'

SEWER LEGEND

PROJECT LIMITS
EXISTING WATER
EXISTING SEWER
PROPOSED SEWER
PROPOSED WATER
PROPOSED SEWER LATERAL
TE PROPOSED SEWER LATERAL INTO EXISTING SEWER EXTENSION
FINISHED FLOOR ELEVATION FOR SEWER
FF = XXXX.XX
VEHICULAR NON ACCESS EASEMENT
VNAE



TYPICAL SANITARY SEWER/WATER CROSSING DETAIL
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DATE
NO. REVISION

EUGENE H. DAWSON III
112782
REGISTERED PROFESSIONAL ENGINEER
11/7/23

PAPE-DAWSON ENGINEERS
SAN ANTONIO | AUSTIN | HOUSTON | FORT WORTH | DALLAS
2000 NW LOOP 410 | SAN ANTONIO, TX 78213 | 210.375.9000
TBPE FIRM REGISTRATION #470 | TBPLS SURVEY FIRM #100288-00

STONE GARDEN - UNIT 2A
BEXAR COUNTY, TEXAS
OVERALL SANITARY SEWER PLAN

PLAT NO. 22-11800734
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DATE AUGUST 2023
DESIGNER JG
CHECKED DW DRAWN TC
SHEET C5.03

Attachments

Start of testing, Chalk Cave

Figure 1

End of Testing, Chalk Cave

Figure 2

Attachments

Start of Testing, Granite Garden

Figure 3

Granite Garden Con.

Figure 4

Attachments

End of Testing, Granite Garden

Figure 5

TX Registered Firm # F-8461

ECS Southwest, LLP
431 Isom Road, Suite 114
San Antonio, TX 78216
T 210.528.1430
F 214.483.9684

LETTER OF TRANSMITTAL

September 23, 2025
Lennar
100 NE Loop 410 Suite 1155
San Antonio, TX 78216

ATTN: Mr. Nathan Nowell

RE: **Stone Garden - Unit 2A**
ECS Job # **20:1910**

Permits:
Location: **14395 Old Corpus Christi Road**
Elmendorf, TX 78112

X Field Reports **X** For your use **X** As requested

CC: City of San Antonio - Development Services Department - Juan Ramirez
Lennar - Rogelio "Roy" Olivarez, Jr.
V.K. Knowlton Construction - Sammy Ramos

ENCL: Field Report # 95 9/23/2025 Soil Density Testing

Adam James Heiman, P.E.
Assistant Office Manager

Stephanie Marie Chavez
CMT Project Professional I

TX Registered Engineering Firm # F-8461

ECS Southwest, LLP
431 Isom Road, Suite 114
San Antonio, TX 78216
T 210.528.1430
F 214.483.9684

FIELD REPORT

Project	**Stone Garden - Unit 2A**
Location	**Elmendorf, TX**
Client	**Lennar**
Contractor	**Lennar**

Project No.	**20:1910**
Report No.	**95**
Day & Date	**Tuesday 9/23/2025**
Weather	**92 °/ Sunny**
On-Site Time	**1.25**
Lab Time	**0.00**
Travel Time*	**0.25**
Total	**1.50**
Re Obs Time	**0.00**

Remarks **Soil Density Testing**

Trip Charges*	Tolls/Parking*	Mileage*	Time of	Arrival	Departure
35.00				**1:15P**	**2:30P**
Chargeable Items **5000**					

* Travel time and mileage will be billed in accordance with the contract.

Summary of Services Performed (field test data, locations, elevations & depths are estimates) & Individuals Contacted.

The undersigned arrived on-site, as requested to observe the placement and compaction of A2 base material.

Location:
Quartz Cove
Granite Garden
Dacite Place
Gabbro Cove

Please see the attached sketch.

Civil plan page C7.00 dated 11/14/23 and Geotechnical Report dated 04/25/22 were reviewed prior to testing.

Utilizing the Nuclear Method ASTM D6938, to check the compaction of A2 base material at the areas and elevations tested, test results met the project requirements of 95% of the corrected maximum dry density and a moisture content of -2% to 3% from optimum, as determined in our laboratory using the State Proctor Method TEX-113-E.

Prior to departure, Sammy Ramos with V.K Knowlton was informed of the results of the day's testing and observations.

By Sergio A Trevino 1800

Field Compaction Summary, D6938

Project No: 20:1910 Project Name: Stone Garden - Unit 2A Date: 9/23/2025

ECS Southwest, LLP

Client: Lennar

Contractor: Lennar

Technician: Sergio A Trevino

Test Method D6938			
Nuclear Gauge No. 5519			
Make	Instrotek	Density Std	2897
Model	3500	Moisture Std	683
Ser. No.	5519		

Sample No.	Description	Proctor Method	Uncorrected Max. Density	Uncorrected Optimum Moisture Content
D4S-12	**(GP-GC) POORLY GRADED GRAVEL WITH SILTY CLAY & SAND, Light Tan**	**TEX-113-E**	**137.7**	**4.5**

Test No.	Lot No.	Test Mode	Probe Depth (in.)	Station / Location	Lift / Elev	Sample No.	% Oversize	Corrected Max. Density	Corrected Optimum Moisture Content (%)	Wet Density (pcf)	Dry Density (pcf)	Moisture Content (%)	Percent Comp. (%)	P / F	Comments
1		DT	6	Quartz Cove, STA 14+00	Final	D4S-12	0.00	137.7	4.5	137.0	132.5	3.4	96.2	P	
2		DT	6	Quartz Cove, STA 12+50	Final	D4S-12	0.00	137.7	4.5	141.3	136.8	3.3	99.3	P	
3		DT	6	Quartz Cove, STA 111+00	Final	D4S-12	0.00	137.7	4.5	138.7	134.0	3.5	97.3	P	
4		DT	6	Quartz Cove, STA 19+50	Final	D4S-12	0.00	137.7	4.5	139.2	135.0	3.1	98.0	P	
5		DT	6	Quartz Cove, STA 18+00	Final	D4S-12	0.00	137.7	4.5	140.8	135.1	4.2	98.1	P	
6		DT	6	Quartz Cove, STA 16+50	Final	D4S-12	0.00	137.7	4.5	143.5	138.1	3.9	100.3	P	
7		DT	6	Quartz Cove, STA 15+00	Final	D4S-12	0.00	137.7	4.5	143.5	138.2	3.9	100.4	P	
8		DT	6	Quartz Cove, STA 13+50	Final	D4S-12	0.00	137.7	4.5	146.9	142.1	3.4	103.2	P	
9		DT	6	Quartz Cove, STA 12+00	Final	D4S-12	0.00	137.7	4.5	144.4	139.2	3.7	101.1	P	
10		DT	6	Granite Garden, STA 1+00	Final	D4S-12	0.00	137.7	4.5	148.3	142.0	4.4	103.1	P	

Test Mode: DT = Direct Transmission BS = Back Scatter

WO: 46687

Field Compaction Summary, D6938

Project No: 20:1910 Project Name: Stone Garden - Unit 2A Date: 9/23/2025

ECS Southwest, LLP

Client: Lennar

Contractor: Lennar

Technician: Sergio A Trevino

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Nuclear Gauge No. 5519			
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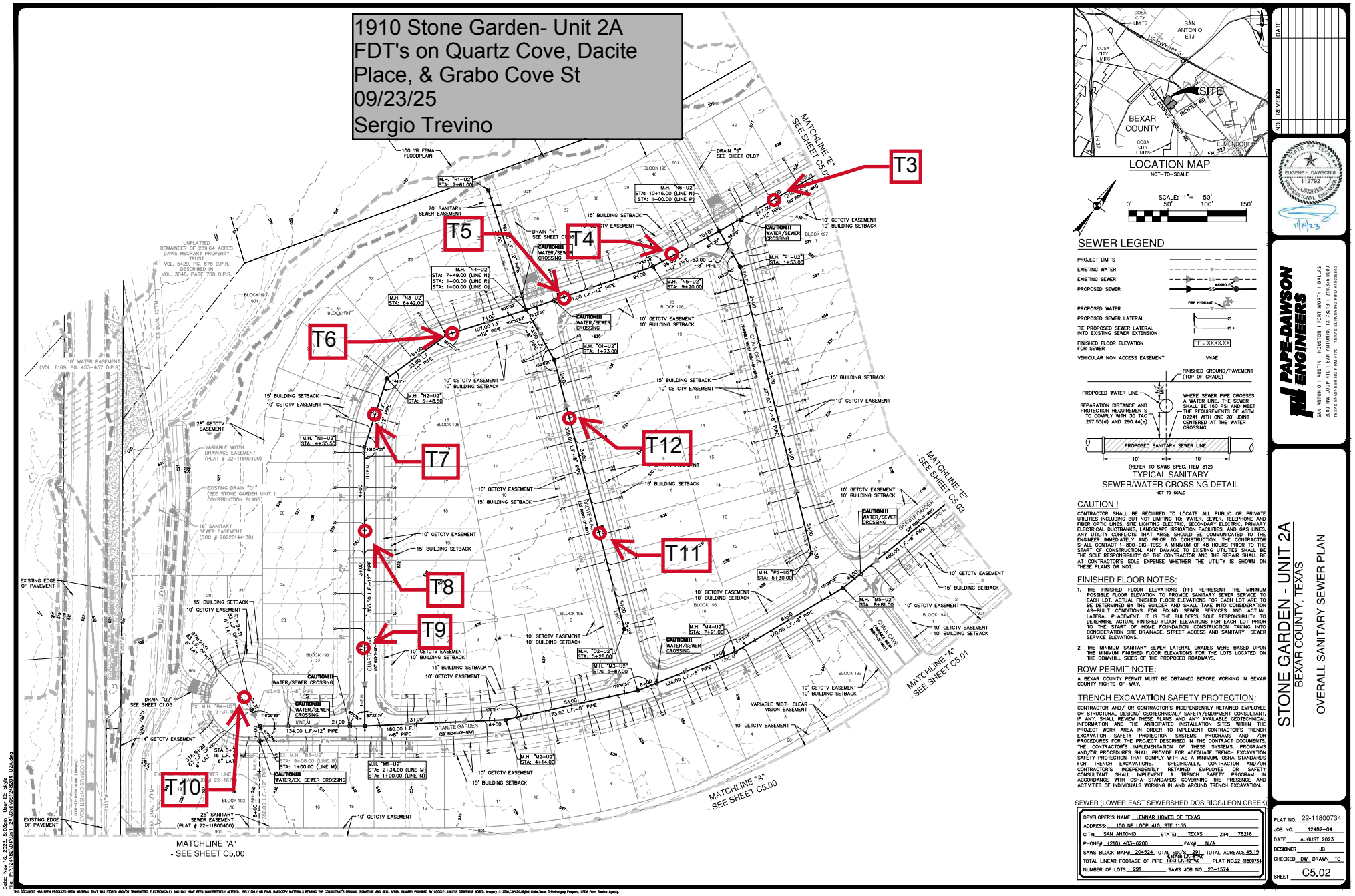
11		DT	6	Dacite Place, STA 4+00	Final	D4S-12	0.00	137.7	4.5	144.6	137.7	5.0	100.0	P	
12		DT	6	Dacite Place, STA 2+50	Final	D4S-12	0.00	137.7	4.5	150.0	144.6	3.7	105.0	P	
13		DT	6	Gabbro Cove, STA 1+50	Final	D4S-12	0.00	137.7	4.5	149.1	143.1	4.2	103.9	P	
14		DT	6	Gabbro Cove, STA 5+00	Final	D4S-12	0.00	137.7	4.5	145.6	137.8	5.7	100.1	P	
15		DT	6	Gabbro Cove, STA 3+50	Final	D4S-12	0.00	137.7	4.5	146.1	139.0	5.0	100.9	P	
16		DT	6	Gabbro Cove, STA 1+50	Final	D4S-12	0.00	137.7	4.5	150.1	142.9	5.0	103.8	P	


1910 Stone Garden- Unit 2A
FDT's on Quartz Cove, Dacite Place, & Grabo Cove St
09/23/25
Sergio Trevino
T1
T2
T3
T4
T5
T6
T7
T8
T9
T10
T11
T12
MATCHLINE "A" - SEE SHEET C5.00
MATCHLINE "A" - SEE SHEET C5.01
MATCHLINE "E" - SEE SHEET C5.03
MATCHLINE "E" - SEE SHEET C5.04
LOCATION MAP
NOT-TO-SCALE
SCALE: 1" = 50'
0' 50' 100' 150'
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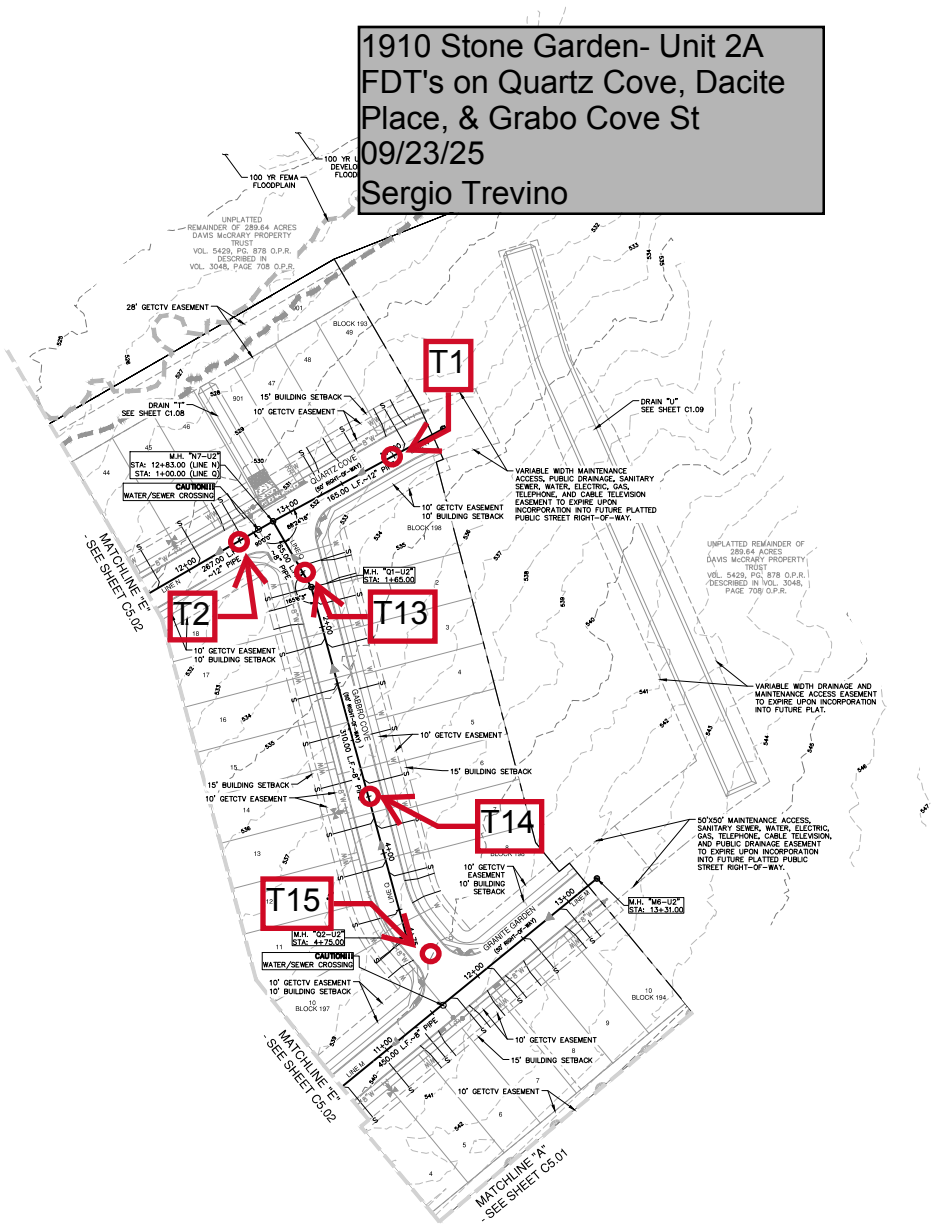

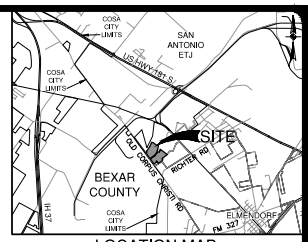

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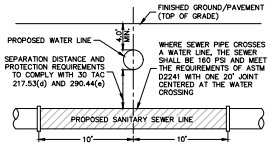

(REFER TO SAWS SPEC. ITEM 812)

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A BEXAR COUNTY PERMIT MUST BE OBTAINED BEFORE WORKING IN BEXAR COUNTY RIGHTS-OF-WAY.

TRENCH EXCAVATION SAFETY PROTECTION:

CONTRACTOR AND/ OR CONTRACTOR'S INDEPENDENTLY RETAINED EMPLOYEE OR STRUCTURAL DESIGN/ GEOTECHNICAL/ SAFETY/EQUIPMENT CONSULTANT, IF ANY, SHALL REVIEW THESE PLANS AND ANY AVAILABLE GEOTECHNICAL INFORMATION AND THE ANTICIPATED INSTALLATION SITES WITHIN THE PROJECT WORK AREA IN ORDER TO IMPLEMENT CONTRACTOR'S TRENCH EXCAVATION SAFETY PROTECTION SYSTEMS, PROGRAMS AND /OR PROCEDURES FOR THE PROJECT DESCRIBED IN THE CONTRACT DOCUMENTS. THE CONTRACTOR'S IMPLEMENTATION OF THESE SYSTEMS, PROGRAMS AND/OR PROCEDURES SHALL PROVIDE FOR ADEQUATE TRENCH EXCAVATION SAFETY PROTECTION THAT COMPLY WITH AS A MINIMUM, OSHA STANDARDS FOR TRENCH EXCAVATIONS. SPECIFICALLY, CONTRACTOR AND/OR CONTRACTOR'S INDEPENDENTLY RETAINED EMPLOYEE OR SAFETY CONSULTANT SHALL IMPLEMENT A TRENCH SAFETY PROGRAM IN ACCORDANCE WITH OSHA STANDARDS GOVERNING THE PRESENCE AND ACTIVITIES OF INDIVIDUALS WORKING IN AND AROUND TRENCH EXCAVATION.

SEWER (LOWER-EAST SEWERSHED-DOS RIOS/LEON CREEK)

DEVELOPER'S NAME: LENNAR HOMES OF TEXAS
ADDRESS: 100 NE LOOP 410, STE 1150
CITY: SAN ANTONIO STATE: TEXAS ZIP: 78216
PHONE# (210) 403-6200 FAX# N/A
SAWS BLOCK MAP# 204524 TOTAL EDU'S 291 TOTAL ACREAGE 45.15
TOTAL LINEAR FOOTAGE OF PIPE: 4,467.00 LF-8"PVC 1,693 LF-12"PVC PLAT NO. 22-11800734
NUMBER OF LOTS 291 SAWS JOB NO. 23-1574

NO.	REVISION	DATE

EUGENE H. DAWSON III 112792 LICENSED PROFESSIONAL ENGINEER 11/14/23

PAPE-DAWSON ENGINEERS
SAN ANTONIO | AUSTIN | HOUSTON | FORT WORTH | DALLAS
2000 NW LOOP 410 | SAN ANTONIO, TX 78213 | 210.375.9000
TEXAS ENGINEERING FIRM #470 | TEXAS SURVEYING FIRM #100288-00

STONE GARDEN - UNIT 2A
BEXAR COUNTY, TEXAS
OVERALL SANITARY SEWER PLAN

PLAT NO. 22-11800734
JOB NO. 12482-04
DATE AUGUST 2023
DESIGNER JG
CHECKED DW DRAWN TC
SHEET C5.03

Date: Nov 16, 2023, 6:04pm User ID: Mark
File: P:\12482\04\04\Unit-2A\Civil\05124804-U2A.dwg

Attachments

Area tested

Figure 1

Area tested

Figure 2

Attachments

Area tested

Figure 3

TX Registered Firm # F-8461

ECS Southwest, LLP
431 Isom Road, Suite 114
San Antonio, TX 78216
T 210.528.1430
F 214.483.9684

LETTER OF TRANSMITTAL

September 30, 2025
Lennar
100 NE Loop 410 Suite 1155
San Antonio, TX 78216

ATTN: Mr. Nathan Nowell

RE: **Stone Garden - Unit 2A**
ECS Job # **20:1910**

Permits:
Location: **14395 Old Corpus Christi Road**
Elmendorf, TX 78112

X Field Reports **X** For your use **X** As requested

CC: City of San Antonio - Development Services Department - Juan Ramirez
Lennar - Rogelio "Roy" Olivarez, Jr.
V.K. Knowlton Construction - Sammy Ramos

ENCL: Field Report # 96 9/30/2025 Soil Density Testing/ Pick up

Adam James Heiman, P.E.
Assistant Office Manager

Stephanie Marie Chavez
CMT Project Professional I

Disclaimer

1. *This report (and any attachments) shall not be reproduced except in full without prior written approval of ECS.*
2. *The information in this report relates only to the activities performed on the report date.*
3. *Where appropriate, this report includes statements as to compliance with applicable project drawings, and specifications for the activities, performed on this report date.*
4. *Incomplete or non-conforming work will be reported for future resolution.*
5. *The results of samples and/or specimens obtained or prepared for subsequent laboratory testing will be presented in separate reports/documents.*

TX Registered Engineering Firm # F-8461

ECS Southwest, LLP
431 Isom Road, Suite 114
San Antonio, TX 78216
T 210.528.1430
F 214.483.9684

FIELD REPORT

Project	**Stone Garden - Unit 2A**
Location	**Elmendorf, TX**
Client	**Lennar**
Contractor	**Lennar**

Project No.	**20:1910**
Report No.	**96**
Day & Date	**Tuesday 9/30/2025**
Weather	**78 °/ Sunny**
On-Site Time	**1.25**
Lab Time	**0.75**
Travel Time*	**0.50**
Total	**2.50**
Re Obs Time	**0.00**

Remarks **Soil Density Testing/ Pick up**

Trip Charges*	Tolls/Parking*	Mileage*	Time of	Arrival	Departure
35.00				**8:15A**	**9:30A**
Chargeable Items **5000**					

* Travel time and mileage will be billed in accordance with the contract.

Summary of Services Performed (field test data, locations, elevations & depths are estimates) & Individuals Contacted.

The undersigned arrived on-site, as requested, to observe the compaction of the Base Material.

Location:
Chalk Cave from Station 9+75 to 11+50
Please see the attached sketch.

Geotechnical report dated 4/25/2022 was reviewed prior to testing.

Utilizing the Nuclear Method ASTM D6938, to check the compaction of base material at the areas and elevations tested, test results met the project requirements of 95% of the corrected maximum dry density and moisture content of -2% to +3% of optimum, as determined in our laboratory using the Modified Proctor Method TEX-113-E.

Noted exceptions:
City of San Antonio Inspector, Santiago Vidales, was notified of the dry density results exceeding 105% and gave ECS permission to proceed with testing observations for the road base at Chalk Cove.

SOIL SAMPLE PICKUP:
While on site, as requested, the undersigned obtained 1 sample of A2 base material for testing in our laboratory. The sample was obtained from the base material stock pile imported from Vulcan Materials Company plant 4157-111 1604 Base Limestone.

Location:
Near the intersections of Mudstone Place and Hornblende Trails

Prior to departure, Sammy Ramos with V.K. Knowlton was informed of the results of the day's

By Tyler Batungbacal 1800

observations.

Field Compaction Summary, D6938

Project No: 20:1910 Project Name: Stone Garden - Unit 2A Date: 9/30/2025

ECS Southwest, LLP

Client: Lennar

Contractor: Lennar

Technician: Tyler Batungbacal

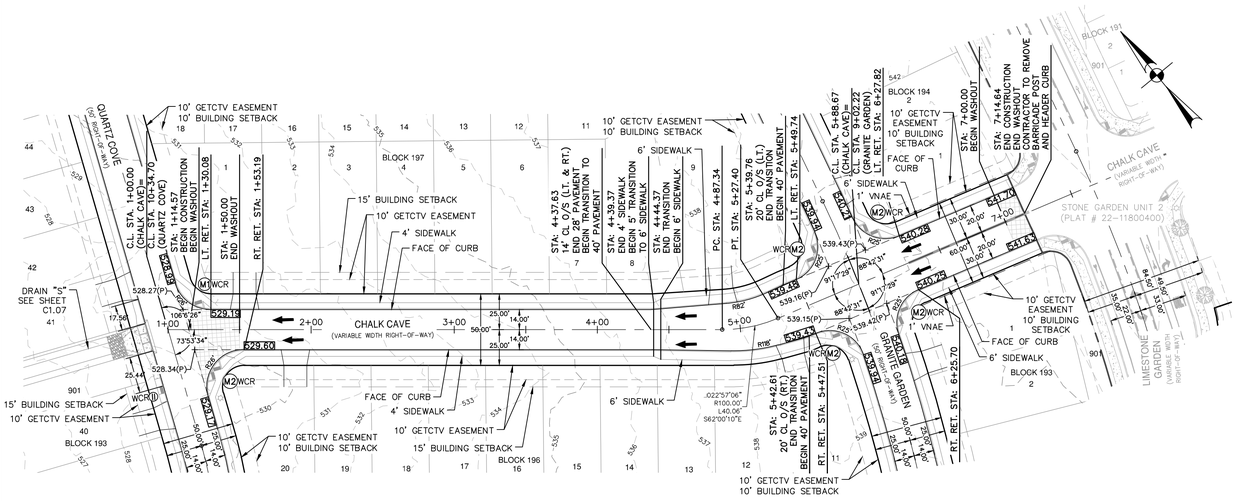
Test Method D6938			
Nuclear Gauge No. 78650			
Make	Troxler	Density Std	2533
Model	3430P	Moisture Std	676
Ser. No.	78650		

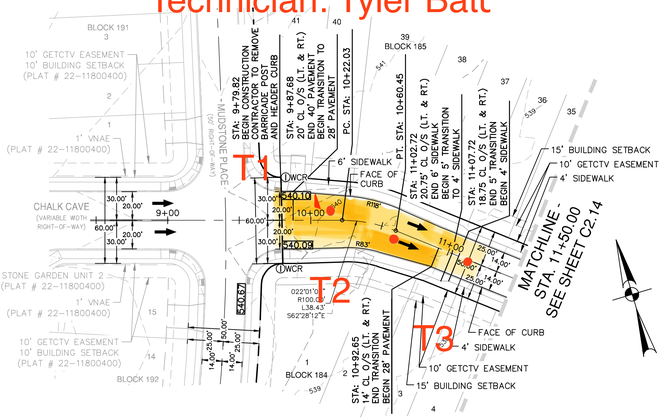
Sample No.	Description	Proctor Method	Uncorrected Max. Density	Uncorrected Optimum Moisture Content
D4S-12	**(GP-GC) POORLY GRADED GRAVEL WITH SILTY CLAY & SAND, Light Tan**	**TEX-113-E**	**137.7**	**4.5**

Test No.	Lot No.	Test Mode	Probe Depth (in.)	Station / Location	Lift / Elev	Sample No.	% Oversize	Corrected Max. Density	Corrected Optimum Moisture Content (%)	Wet Density (pcf)	Dry Density (pcf)	Moisture Content (%)	Percent Comp. (%)	P / F	Comments
1		DT	6	Chalk Cave, STA 10+40	Lift 2	D4S-12	0.00	137.7	4.5	153.5	146.9	4.5	106.7	P	City of San Antonio Inspector, Santiago Vidales approved test
2		DT	6	Chalk Cave, STA 10+95	Lift 2	D4S-12	0.00	137.7	4.5	153.9	147.9	4.1	107.4	P	City of San Antonio Inspector, Santiago Vidales approved test
3		DT	6	Chalk Cave, STA 11+50	Lift 2	D4S-12	0.00	137.7	4.5	156.5	148.1	5.7	107.6	P	City of San Antonio Inspector, Santiago Vidales approved test

Test Mode: DT = Direct Transmission BS = Back Scatter

WO: 46886





STREET LEGEND

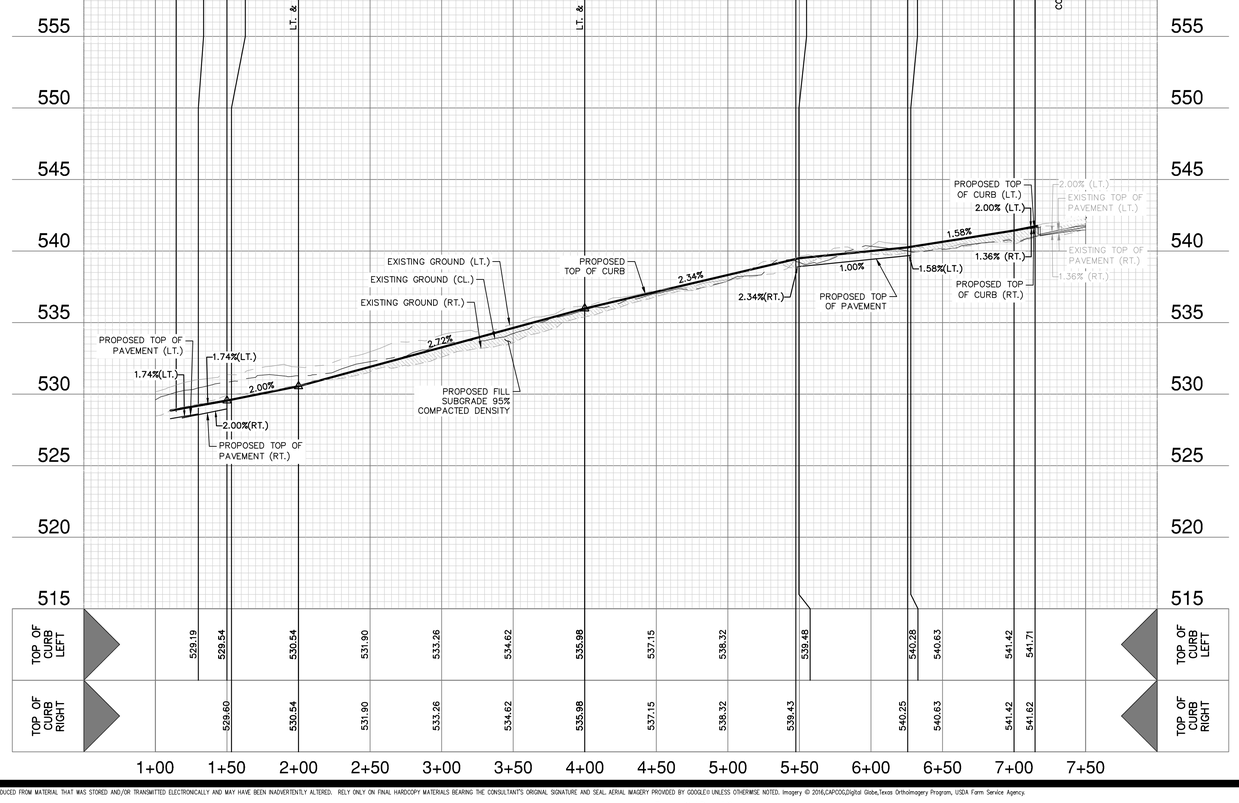
PROJECT LIMITS	
MAINTAIN GUTTER	
EXISTING CONTOUR	970
WHEELCHAIR RAMP	
CENTERLINE	CL
RADIUS POINT	RP
POINT OF CURVATURE	PC
POINT OF TANGENCY	PT
RETURN	RET
DRAINAGE FLOW ARROW	
TOP OF CURB SPOT ELEVATION	857.30
PAVEMENT ELEVATION	857.00(P) ×
WASHOUT CROWN SECTION	
SIDEWALK (HOMEOWNER'S RESPONSIBILITY)	
SIDEWALK (DEVELOPER'S RESPONSIBILITY)	
DRIVEWAY	
CLEAR VISION EASEMENT	CVE

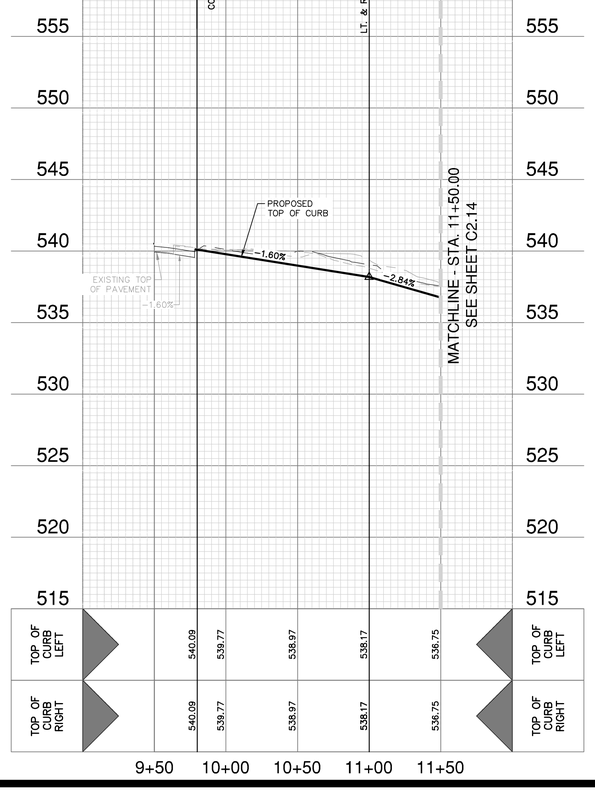
SCALE: 1"= 50'
0' 50' 100' 150'

CHALK CAVE
STA. 1+00.00 TO 7+14.64

CHALK CAVE
STA. 9+79.82 TO 11+50.00

VERTICAL SCALE: 1" = 5'
HORIZONTAL SCALE: 1" = 50'





STREET NOTES:

1. A BEXAR COUNTY ROW PERMIT MUST BE OBTAINED BEFORE WORKING IN BEXAR COUNTY ROW. CONTRACTOR SHALL COORDINATE A TRAFFIC CONTROL PLAN FOR ALL WORK WITHIN THE ROW. ADDITIONAL WARNING SIGNS MAY BE RECOMMENDED BY THE ENGINEER ONCE THE ROADWAYS ARE CONSTRUCTED.
2. CONTRACTOR SHALL MATCH EXISTING PAVEMENT AT TIE–IN. IF EXISTING PAVEMENT ELEVATION DIFFERS SIGNIFICANTLY, CONTRACTOR SHALL NOTIFY THE ENGINEER PRIOR TO CONTINUING WORK.
3. SIDEWALKS SHALL BE CONSTRUCTED 3–FT FROM THE BACK OF CURB FOR ALL LOCATIONS WHERE THE SIDEWALK IS SHOWN OFFSET. REFER TO STREET DETAIL SHEET FOR SIDEWALK AND RAMP DETAILS.
4. NO PERMANENT STRUCTURES HIGHER THAN 3 FEET, AND LOWER THAN 8 FEET ABOVE THE PAVEMENT, INCLUDING STRUCTURES, WALLS, FENCES, AND VEGETATION, SHALL BE CONSTRUCTED OR ALLOWED WITHIN THE CLEAR VISION EASEMENT. CONTRACTOR SHALL GRADE AREAS WITHIN CLEAR VISION EASEMENTS SUCH THAT THE ELEVATION WITHIN THE CLEAR VISION EASEMENT IS NOT HIGHER THAN 3 FEET ABOVE THE ADJACENT TOP OF PAVEMENT.
5. DRIVEWAYS SHOWN ON THIS PLAN ARE FOR THE SOLE PURPOSE OF INDICATING A POTENTIAL CONFLICT WITH CURB RAMP, DRAINAGE INFRASTRUCTURE, OR OTHER CONFLICT. DRIVEWAY LOCATION IS SUBJECT TO CHANGE BASED ON HOME SELECTION AND FINAL LOT DESIGN.
6. CHANGES IN THE SIDEWALK LOCATION FOR A MAXIMUM LINEAR DISTANCE OF TWO HUNDRED (200) FEET ARE PERMITTED TO BE APPROVED BY THE FIELD INSPECTOR WITHOUT AMENDING THE STREET PLAN OR UTILITY LAYOUT PER UDC SECTION 35–506 (Q)(6).
7. THE CONSTRUCTION OF SIDEWALKS ADJACENT TO ALL 900 SERIES LOTS WILL BE THE RESPONSIBILITY OF THE DEVELOPER AS SHOWN ON THE OVERALL SIGNAGE PLAN. REFER TO SHEET C3.00 FOR LOCATIONS OF SIDEWALK CONSTRUCTION.
8. FILL MATERIAL SHOULD BE NATIVE ON–SITE MATERIAL, FREE OF DELETERIOUS MATERIAL WITH A MINIMUM CBR VALUE OF 4.0 AND A PI MAXIMUM OF 20. THE GRAVEL SIZE SHOULD NOT EXCEED 3 INCHES IN DIAMETER. LIME APPLICATION RATE SHOULD BE RE–EVALUATED FOR THE FILL MATERIAL. THE MATERIAL SHOULD BE PLACED AS PER APPLICABLE CITY OR COUNTY GUIDELINES.

NO.	REVISION	DATE

STATE OF TEXAS
EUGENE H. DAWSON III
112792
LICENSED
PROFESSIONAL ENGINEER
11/14/23

PAPE-DAWSON ENGINEERS
SAN ANTONIO | AUSTIN | HOUSTON | FORT WORTH | DALLAS
2000 NW LOOP 410 | SAN ANTONIO, TX 78213 | 210.375.9000
TEXAS ENGINEERING FIRM #470 | TEXAS SURVEYING FIRM #10028800

STONE GARDEN - UNIT 2A
BEXAR COUNTY, TEXAS

CHALK CAVE PLAN & PROFILE (STA 1+00.00 TO 7+14.64 & 9+79.82 TO 11+50.00)

PLAT NO. 22-11800734
JOB NO. 12482-04
DATE AUGUST 2023
DESIGNER JG
CHECKED DW DRAWN TC
SHEET C2.13

Date: Nov 17, 2023, 10:24am User ID: bkyle
File: P:\12482\04\Unit-2A\Civil\ST12482804-U2A CHALK CAVE.dwg

Attachments

Approx. test site

Figure 1

STA 10+50

Figure 2

Attachments

Test site street: chalk cave

Figure 3

Water truck

Figure 4

Attachments

A2 Base delivery

Figure 5

A2 base material at Mudstone Place

Figure 6

Attachments

A2 Base stockpile

Figure 7

TX Registered Firm # F-8461

ECS Southwest, LLP
431 Isom Road, Suite 114
San Antonio, TX 78216
T 210.528.1430
F 214.483.9684

LETTER OF TRANSMITTAL

October 08, 2025
Lennar
100 NE Loop 410 Suite 1155
San Antonio, TX 78216

ATTN: Mr. Nathan Nowell

RE: **Stone Garden - Unit 2A**
ECS Job # **20:1910**

Permits:
Location: **14395 Old Corpus Christi Road**
Elmendorf, TX 78112

X Field Reports **X** For your use **X** As requested

CC: City of San Antonio - Development Services Department - Juan Ramirez
Lennar - Rogelio "Roy" Olivarez, Jr.
V.K. Knowlton Construction - Sammy Ramos

ENCL: Field Report # 97 10/6/2025 Soil Densities (Pavement Area Flex. Base)

Adam James Heiman, P.E.
Assistant Office Manager

Gerald W. Bolgren
CMT Senior Project Professional

TX Registered Engineering Firm # F-8461

ECS Southwest, LLP
431 Isom Road, Suite 114
San Antonio, TX 78216
T 210.528.1430
F 214.483.9684

FIELD REPORT

Project	**Stone Garden - Unit 2A**
Location	**Elmendorf, TX**
Client	**Lennar**
Contractor	**Lennar**

Project No.	**20:1910**
Report No.	**97**
Day & Date	**Monday 10/6/2025**
Weather	**90 °/ Fair to P. Cloudy**
On-Site Time	**1.75**
Lab Time	**0.50**
Travel Time*	**0.50**
Total	**2.75**
Re Obs Time	**0.00**

Remarks **Soil Densities (Pavement Area Flex. Base)**

Trip Charges*	Tolls/Parking*	Mileage*	Time of	Arrival	Departure
35.00				**9:00A**	**10:45A**
Chargeable Items **5000**					

* Travel time and mileage will be billed in accordance with the contract.

Summary of Services Performed (field test data, locations, elevations & depths are estimates) & Individuals Contacted.

As requested and scheduled, the engineering technician identified below, arrived on site to perform in-place soil density testing on pavement areas (roadways) flexible base material at the following locations:

Location:
Mudstone Place – approximately between STA 4+56 to 9+93, final lift.
Fiore Garden – approximately between STA 1+00 to 4+71, final lift.
Azzurro Stone – approximately between STA 4+50 to 13+60, final lift.
Chalk Cave - approximately between STA 9+79 to 15+31, final lift.
Please see the attached drawing for approximate test locations.

The technician reviewed the project contract documents including civil drawing sheets C2.16, C7.00, and C7.03, dated 11/14/2023, as well as the Geotechnical report of record, dated 04/25/2022.

Utilizing the nuclear method ASTM D6938, to test the compaction of the flexible base at the locations and elevations referenced in the attached report, the test results were found to meet the project's minimum compaction requirements of 95% of the maximum dry density and an optimum moisture content range of -2% to +3%, as determined in our laboratory utilizing the Tex-113-E proctor method.

NO EXCEPTIONS WERE NOTED.

Prior to the technicians' departure, Sammy Ramos representing V.K. Knowlton was notified of the observations and testing performed today.

By Paul Anthony White 1800

Field Compaction Summary, ASTM D6938

Project No: 20:1910 Project Name: Stone Garden - Unit 2A Date: 10/6/2025

ECS Southwest, LLP

Client: Lennar

Contractor: Lennar

Technician: Paul Anthony White

Test Method ASTM D6938			
Nuclear Gauge No. 4964			
Make	Instrotek	Density Std	2721
Model	3500 Xplorer	Moisture Std	683
Ser. No.	4964		

Sample No.	Description	Proctor Method	Uncorrected Max. Density	Uncorrected Optimum Moisture Content
D4S-12	**(GP-GC) POORLY GRADED GRAVEL WITH SILTY CLAY & SAND, Lt. Brown (Crushed Limestone)**	**TEX-113-E**	**137.7**	**4.5**

Test No.	Lot No.	Test Mode	Probe Depth (in.)	Station / Location	Lift / Elev	Sample No.	% Oversize	Corrected Max. Density	Corrected Optimum Moisture Content (%)	Wet Density (pcf)	Dry Density (pcf)	Moisture Content (%)	Percent Comp. (%)	P / F	Comments
1		DT	4	Mudstone Place flexible base, near STA 9+50, rt. of centerline.	Final Lift	D4S-12	0.00	137.7	4.5	138.9	132.9	4.5	96.5	P	
2		DT	4	Mudstone Place flexible base, near STA 8+00, lt. of centerline.	Final Lift	D4S-12	0.00	137.7	4.5	141.9	136.5	4.0	99.1	P	
3		DT	4	Mudstone Place flexible base, near STA 6+50, centerline.	Final Lift	D4S-12	0.00	137.7	4.5	144.4	138.7	4.1	100.7	P	
4		DT	4	Mudstone Place flexible base, near STA 5+00, rt. of centerline.	Final Lift	D4S-12	0.00	137.7	4.5	145.3	139.0	4.5	100.9	P	
5		DT	4	Fiore Garden flexible base, near STA 1+50, centerline.	Final Lift	D4S-12	0.00	137.7	4.5	145.6	138.9	4.8	100.9	P	

Test Mode: DT = Direct Transmission BS = Back Scatter

WO: 46971

Field Compaction Summary, ASTM D6938

Project No: 20:1910 Project Name: Stone Garden - Unit 2A Date: 10/6/2025

ECS Southwest, LLP

Client: Lennar

Contractor: Lennar

Technician: Paul Anthony White

Test Method ASTM D6938			
Nuclear Gauge No. 4964			
Make	Instrotek	Density Std	2721
Model	3500 Xplorer	Moisture Std	683
Ser. No.	4964		

Test No.	Lot No.	Test Mode	Probe Depth (in.)	Station / Location	Lift / Elev	Sample No.	% Oversize	Corrected Max. Density	Corrected Optimum Moisture Content (%)	Wet Density (pcf)	Dry Density (pcf)	Moisture Content (%)	Percent Comp. (%)	P / F	Comments
6		DT	4	Fiore Garden flexible base, near STA 2+80, rt. of centerline.	Final Lift	D4S-12	0.00	137.7	4.5	142.4	135.6	5.0	98.5	P	
7		DT	4	Fiore Garden flexible base, near STA 4+30, lt. of centerline.	Final Lift	D4S-12	0.00	137.7	4.5	136.3	131.8	3.4	95.7	P	
8		DT	4	Azzurro Stone flexible base, near STA 5+00, centerline.	Final Lift	D4S-12	0.00	137.7	4.5	140.9	135.6	4.0	98.5	P	
9		DT	4	Azzurro Stone flexible base, near STA 6+00, rt. of centerline.	Final Lift	D4S-12	0.00	137.7	4.5	140.6	134.5	4.5	97.7	P	
10		DT	4	Azzurro Stone flexible base, near STA 7+50, centerline.	Final Lift	D4S-12	0.00	137.7	4.5	141.4	135.9	4.0	98.7	P	
11		DT	4	Azzurro Stone flexible base, near STA 9+00, lt. of centerline.	Final Lift	D4S-12	0.00	137.7	4.5	144.7	136.9	5.6	99.4	P	
12		DT	4	Azzurro Stone flexible base, near STA 11+00, rt. of centerline.	Final Lift	D4S-12	0.00	137.7	4.5	143.0	136.7	4.5	99.3	P	

Field Compaction Summary, ASTM D6938

Project No: 20:1910 Project Name: Stone Garden - Unit 2A Date: 10/6/2025

ECS Southwest, LLP

Client: Lennar

Contractor: Lennar

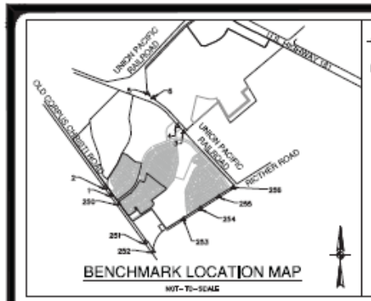
Technician: Paul Anthony White

Test Method ASTM D6938			
Nuclear Gauge No. 4964			
Make	Instrotek	Density Std	2721
Model	3500 Xplorer	Moisture Std	683
Ser. No.	4964		

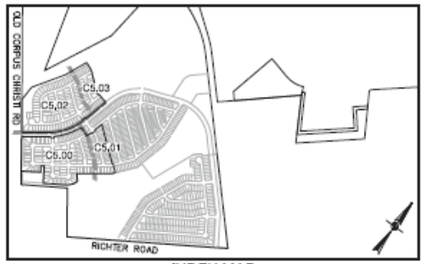
Test No.	Lot No.	Test Mode	Probe Depth (in.)	Station / Location	Lift / Elev	Sample No.	% Oversize	Corrected Max. Density	Corrected Optimum Moisture Content (%)	Wet Density (pcf)	Dry Density (pcf)	Moisture Content (%)	Percent Comp. (%)	P / F	Comments
13		DT	4	Azzurro Stone flexible base, near STA 12+50, lt. of centerline.	Final Lift	D4S-12	0.00	137.7	4.5	144.0	138.3	4.1	100.4	P	
14		DT	4	Azzurro Stone flexible base, near STA 13+55, rt. of centerline.	Final Lift	D4S-12	0.00	137.7	4.5	146.3	138.8	5.4	100.8	P	
15		DT	4	Chalk Cave flexible base, near STA 14+95, lt. of centerline.	Final Lift	D4S-12	0.00	137.7	4.5	143.8	138.5	3.8	100.6	P	
16		DT	4	Chalk Cave flexible base, near STA 13+50, centerline.	Final Lift	D4S-12	0.00	137.7	4.5	142.1	136.2	4.2	98.9	P	
17		DT	4	Chalk Cave flexible base, near STA 12+00, rt. of centerline.	Final Lift	D4S-12	0.00	137.7	4.5	138.4	132.1	4.8	95.9	P	
18		DT	4	Chalk Cave flexible base, near STA 10+50, lt. of centerline.	Final Lift	D4S-12	0.00	137.7	4.5	143.9	138.0	4.3	100.2	P	

BENCHMARKS

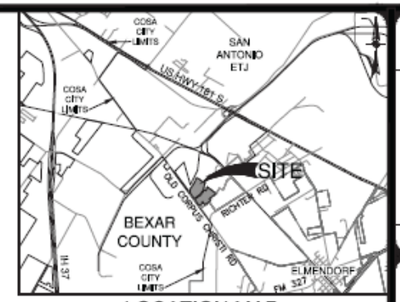
NUMBER	NORTHING	EASTING	DESCRIPTION
1	13,649,523	2,171,843	SET MAG NAIL & WASHER (TRAV)
2	13,649,776	2,171,653	SET IR REDCAP (TRAV)
3	13,651,551	2,174,207	SET IR REDCAP (TRAV)
4	13,651,757	2,174,009	SET IR REDCAP (TRAV)
5	13,652,793	2,173,037	SET IR REDCAP (TRAV)
6	13,652,656	2,173,222	SET IR REDCAP (TRAV)
250	13,649,234	2,172,109	SET IR REDCAP (TRAV)
251	13,647,995	2,172,949	SET IR REDCAP (TRAV)
252	13,647,706	2,173,216	SET IR REDCAP (TRAV)
253	13,648,740	2,174,206	SET IR REDCAP (TRAV)
254	13,649,080	2,174,742	SET IR REDCAP (TRAV)
255	13,649,460	2,175,345	SET IR REDCAP (TRAV)
256	13,649,742	2,175,793	SET IR REDCAP (TRAV)



BENCHMARK LOCATION MAP
NOT-TO-SCALE



INDEX MAP
NOT-TO-SCALE



LOCATION MAP
NOT-TO-SCALE

MATCHLINE "A" - SEE SHEET C5.02

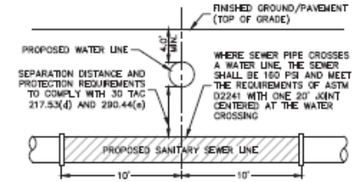
MATCHLINE "B" - SEE SHEET C5.01

T1 T2 T3 T4 T5 T6 T7 T8 T9 T10 T11 T12

SCALE: 1"= 50'
0' 50' 100' 150'

SEWER LEGEND

PROJECT LIMITS
EXISTING WATER
EXISTING SEWER
PROPOSED SEWER
PROPOSED WATER
PROPOSED SEWER LATERAL
TIE PROPOSED SEWER LATERAL INTO EXISTING SEWER EXTENSION
FINISHED FLOOR ELEVATION FOR SEWER (FF = XXXX.XX)
VEHICULAR NON ACCESS EASEMENT (VNAE)



(REFER TO SAWS SPEC. ITEM 812)
TYPICAL SANITARY SEWER/WATER CROSSING DETAIL
NOT-TO-SCALE

CAUTION!!

CONTRACTOR SHALL BE REQUIRED TO LOCATE ALL PUBLIC OR PRIVATE UTILITIES INCLUDING BUT NOT LIMITING TO: WATER, SEWER, TELEPHONE AND FIBER OPTIC LINES, SITE LIGHTING ELECTRIC, SECONDARY ELECTRIC, PRIMARY ELECTRICAL DUCTBANKS, LANDSCAPE IRRIGATION FACILITIES, AND GAS LINES. ANY UTILITY CONFLICTS THAT ARISE SHOULD BE COMMUNICATED TO THE ENGINEER IMMEDIATELY AND PRIOR TO CONSTRUCTION. THE CONTRACTOR SHALL CONTACT 1-800-DIG-TESS A MINIMUM OF 48 HOURS PRIOR TO THE START OF CONSTRUCTION. ANY DAMAGE TO EXISTING UTILITIES SHALL BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR AND THE REPAIR SHALL BE AT CONTRACTOR'S SOLE EXPENSE WHETHER THE UTILITY IS SHOWN ON THESE PLANS OR NOT.

FINISHED FLOOR NOTES:

1. THE FINISHED FLOOR ELEVATIONS (FF) REPRESENT THE MINIMUM POSSIBLE FLOOR ELEVATION TO PROVIDE SANITARY SEWER SERVICE TO EACH LOT. ACTUAL FINISHED FLOOR ELEVATIONS FOR EACH LOT ARE TO BE DETERMINED BY THE BUILDER AND SHALL TAKE INTO CONSIDERATION AS-BUILT CONDITIONS FOR FOUND SEWER SERVICES AND ACTUAL LATERAL PLACEMENT. IT IS THE BUILDER'S SOLE RESPONSIBILITY TO DETERMINE ACTUAL FINISHED FLOOR ELEVATIONS FOR EACH LOT PRIOR TO THE START OF HOME FOUNDATION CONSTRUCTION TAKING INTO CONSIDERATION SITE DRAINAGE, STREET ACCESS AND SANITARY SEWER SERVICE ELEVATIONS.
2. THE MINIMUM SANITARY SEWER LATERAL GRADES WERE BASED UPON THE MINIMUM FINISHED FLOOR ELEVATIONS FOR THE LOTS LOCATED ON THE DOWNHILL SIDES OF THE PROPOSED ROADWAYS.

ROW PERMIT NOTE:

A BEXAR COUNTY PERMIT MUST BE OBTAINED BEFORE WORKING IN BEXAR COUNTY RIGHTS-OF-WAY.

TRENCH EXCAVATION SAFETY PROTECTION:

CONTRACTOR AND/ OR CONTRACTOR'S INDEPENDENTLY RETAINED EMPLOYEE OR STRUCTURAL DESIGN/ GEOTECHNICAL/ SAFETY/EQUIPMENT CONSULTANT, IF ANY, SHALL REVIEW THESE PLANS AND ANY AVAILABLE GEOTECHNICAL INFORMATION AND THE ANTICIPATED INSTALLATION SITES WITHIN THE PROJECT WORK AREA IN ORDER TO IMPLEMENT CONTRACTOR'S TRENCH EXCAVATION SAFETY PROTECTION SYSTEMS, PROGRAMS AND /OR PROCEDURES FOR THE PROJECT DESCRIBED IN THE CONTRACT DOCUMENTS. THE CONTRACTOR'S IMPLEMENTATION OF THESE SYSTEMS, PROGRAMS AND/OR PROCEDURES SHALL PROVIDE FOR ADEQUATE TRENCH EXCAVATION SAFETY PROTECTION THAT COMPLY WITH AS A MINIMUM, OSHA STANDARDS FOR TRENCH EXCAVATIONS. SPECIFICALLY, CONTRACTOR AND/OR CONTRACTOR'S INDEPENDENTLY RETAINED EMPLOYEE OR SAFETY CONSULTANT SHALL IMPLEMENT A TRENCH SAFETY PROGRAM IN ACCORDANCE WITH OSHA STANDARDS GOVERNING THE PRESENCE AND ACTIVITIES OF INDIVIDUALS WORKING IN AND AROUND TRENCH EXCAVATION.

SEWER (LOWER-EAST SEWERSHED-DOS RIOS/LEON CREEK)

DEVELOPER'S NAME: LENNAR HOMES OF TEXAS
ADDRESS: 100 NE LOOP 410 STE 1155
CITY: SAN ANTONIO STATE: TEXAS ZIP: 78216
PHONE# (210) 403-6200 FAX# N/A
SAWS BLOCK MAP# 204524 TOTAL EDU'S 291 TOTAL ACREAGE 65.15
TOTAL LINEAR FOOTAGE OF PIPE: 1,643 LF-12"PVC 1,487.00 LF-8"PVC PLAT NO. 22-11800734
NUMBER OF LOTS: 291 SAWS JOB NO. 23-1574

1910 Stone Garden - Unit 2A
Soil Density Testing (Flex. Base)
10/06/2025
Technician: P. White

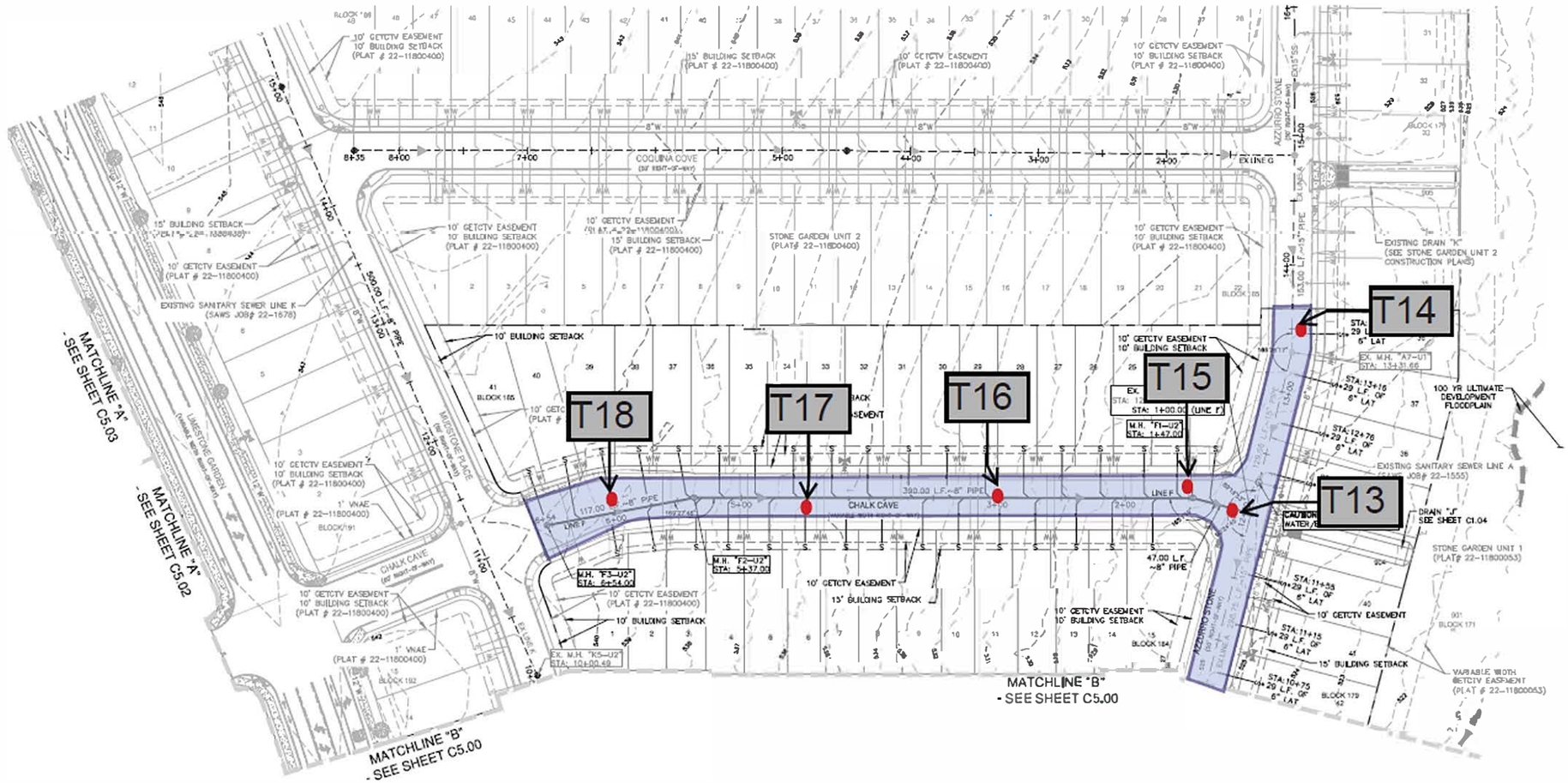
DATE
NO. REVISION

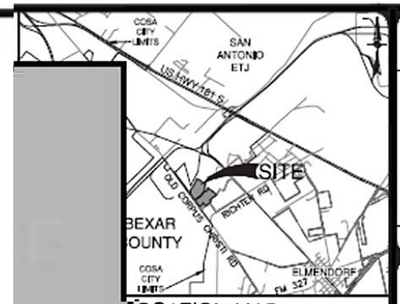
STATE OF TEXAS
EUGENE H. DAWSON III
112792
PROFESSIONAL ENGINEER
11/1/23

PAPE-DAWSON ENGINEERS
SAN ANTONIO | AUSTIN | HOUSTON | FORT WORTH | DALLAS
2305 NW LOOP 410 | SAN ANTONIO, TX 78213 | 210.375.9000
TEXAS ENGINEERING FIRM #470 | TEXAS SURVEYING FIRM #100288-00

STONE GARDEN - UNIT 2A
BEXAR COUNTY, TEXAS
OVERALL SANITARY SEWER PLAN

PLAT NO. 22-11800734
JOB NO. 12482-04
DATE AUGUST 2023
DESIGNED JG
CHECKED DW DRAWN TC
SHEET C5.00





LOCATION MAP

NOT TO-SCALE

SCALE: 1"= 50' 50' 100' 150'

SEWER LEGEND

PROJECT LIMITS

EXISTING WATER

EXISTING SEWER

PROPOSED SEWER

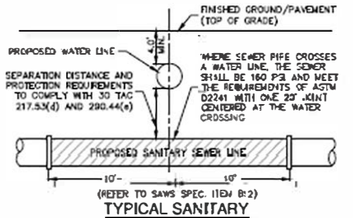
PROPOSED WATER

PROPOSED SEWER LATERAL

TIE PROPOSED SEWER LATERAL INTO EXISTING SEWER EXTENSION

FINISHED FLOOR ELEVATION FOR SEWER

VEHICULAR NON ACCESS EASEMENT



(REFER TO SAWS SPEC. ITEM #12)

TYPICAL SANITARY SEWER/WATER CROSSING DETAIL

NOT-TO-SCALE

CAUTION!!

CONTRACTOR SHALL BE REQUIRED TO LOCATE ALL PUBLIC OR PRIVATE UTILITIES INCLUDING BUT NOT LIMITING TO: WATER, SEWER, TELEPHONE AND FIBER OPTIC LINES, SITE LIGHTING ELECTRIC, SECONDARY ELECTRIC, PRIMARY ELECTRICAL DUCTBANKS, LANDSCAPE IRRIGATION FACILITIES, AND GAS LINES. ANY UTILITY CONFLICTS THAT ARISE SHOULD BE COMMUNICATED TO THE ENGINEER IMMEDIATELY AND PRIOR TO CONSTRUCTION. THE CONTRACTOR SHALL CONTACT 1-800-DIG-TESS A MINIMUM OF 48 HOURS PRIOR TO THE START OF CONSTRUCTION. ANY DAMAGE TO EXISTING UTILITIES SHALL BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR AND THE REPAIR SHALL BE AT CONTRACTOR'S SOLE EXPENSE WHETHER THE UTILITY IS SHOWN ON THESE PLANS OR NOT.

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SEWER (LOWER-EAST SEWERSHED-DOS RIOS/LEON CREE

DEVELOPER'S NAME:	LENNAR HOMES OF TEXAS
ADDRESS:	100 NE LOOP 410 , STE 1155
CITY: SAN ANTONIO	STATE: TEXAS ZIP: 78216
PHONE: (210) 403-8200	FAX# N/A
SAWS BLOCK MAP#: 204326	TOTAL EDU's: 291 TOTAL ACREAGE: 65.15
TOTAL LINEAR FOOTAGE OF PROP. MAIN: 2,610 LF-15"PVC 4,680 LF-8"PVC	PLAT NO: 22-11800734
NUMBER OF LOTS: 291	SAWS JOB NO: 22-1574

DATE

NO. REVISION

EUGENE H. DAWSON III
112792
PROFESSIONAL ENGINEER
11/14/23

PAPE-DAWSON ENGINEERS

SAN ANTONIO | AUSTIN | HOUSTON | FORT WORTH | DALLAS
2000 NW LOOP 410 | SAN ANTONIO, TX 78213 | 210.375.9000
TEXAS ENGINEERING FIRM #470 | TEXAS SURVEYING FIRM #100288-00

STONE GARDEN - UNIT 2A

BEXAR COUNTY, TEXAS

OVERALL SANITARY SEWER PLAN

PLAT NO. 22-11800734
JOB NO. 12482-04
DATE AUGUST 2023
DESIGNED JC
CHECKED DW DRAWN TC
SHEET C5.01

Attachments

Compacted base at the beginning of the Mudstone Pl. section, prior to testing.

Figure 1

Compacted base preparation for testing on Mudstone Pl.

Figure 2

Attachments

Compacted base at the Fiore Garden section, prior to testing.

Figure 3

View of base material processing at Azzurro Stone.

Figure 4

Attachments

View of flexible base processing in progress, Chalk Cave.

Figure 5

TX Registered Firm # F-8461

ECS Southwest, LLP
431 Isom Road, Suite 114
San Antonio, TX 78216
T 210.528.1430
F 214.483.9684

LETTER OF TRANSMITTAL

October 10, 2025
Lennar
100 NE Loop 410 Suite 1155
San Antonio, TX 78216

ATTN: Mr. Nathan Nowell

RE: **Stone Garden - Unit 2A**
ECS Job # **20:1910**

Permits:
Location: **14395 Old Corpus Christi Road**
Elmendorf, TX 78112

X Field Reports **X** For your use **X** As requested

CC: City of San Antonio - Development Services Department - Juan Ramirez
Lennar - Rogelio "Roy" Olivarez, Jr.
V.K. Knowlton Construction - Sammy Ramos

ENCL:

Laboratory testing has been completed for the following sample collected by ECS on 9/30/2025 (reference report 20:1952-96).

SOIL DESCRIPTION:
Tan Crushed Limestone

SOURCE PIT:
Vulcan Materials Company Plant 4157-111 1604.

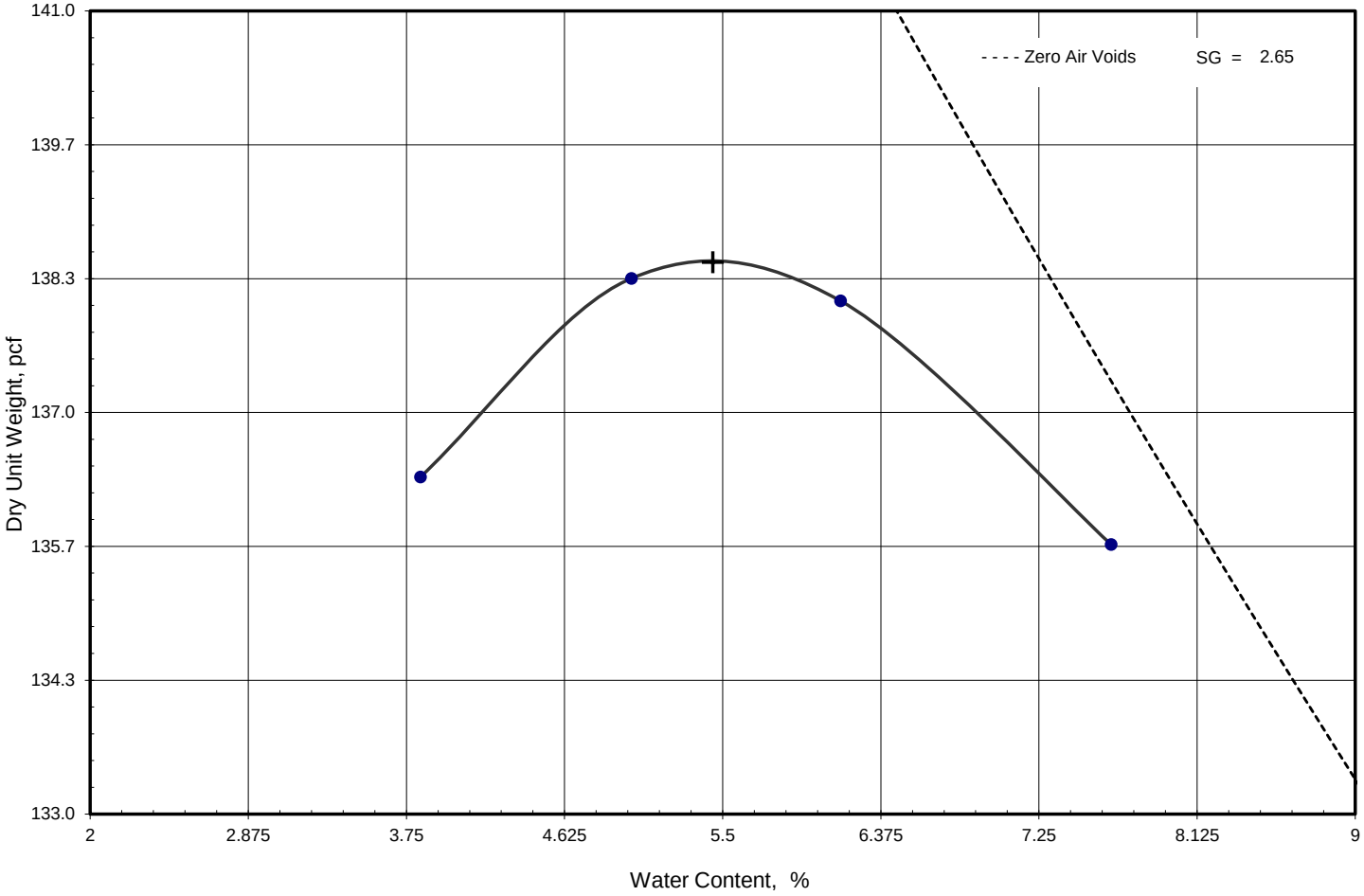
SAMPLE ID:
D4S-23: Atterberg Limits (SP), Sieve Analysis, and TEX-113E

RESULTS:
Material meets criteria for Item A-2 Base for the properties tested.

Frank M. Munoz
Office Manager

Stephanie Marie Chavez
CMT Project Professional I

Laboratory Compaction Characteristics of Soil
TEX-113-E



Optimum Moisture Content	**5.4**	%
Maximum Dry Unit Weight	**138.5**	pcf

Preparation		TEX-101-E
Type of rammer		Mechanical - sector face
Test Specfication / Method		TEX-113-E
Specific gravity - D854 water pycnometer	2.65	Historical

Soil Description	Nat. Moist. %	Liquid Limit	Plasticity Index	%< #200	USCS	AASHTO
(GC-GM) SILTY, CLAYEY GRAVEL WITH SAND, Light Tan	2.9	15	5	19.1	GC-GM	A-1-b

Project: Stone Garden - Unit 2A
Client: Lennar
Sample / Source: Import A2 Base(Item 247) material from Vulcan Materials

Project No.: 20:1910
Depth (ft.): 0 - 1
Sample No.: D4S-23
Date Reported: 10/9/2025

Office / Lab	Address	Office Number / Fax
ECS Southwest LLP - San Antonio	431 Isom Road Suite 114 San Antonio, TX 78216	(210)528-1430 (214)483-9684

Tested by	Checked by	Approved by	Date Received	Remarks
fzuniga	fzuniga	fzuniga		

TX Registered Firm # F-8461

ECS Southwest, LLP
431 Isom Road, Suite 114
San Antonio, TX 78216
T 210.528.1430
F 214.483.9684

LETTER OF TRANSMITTAL

October 10, 2025
Lennar
100 NE Loop 410 Suite 1155
San Antonio, TX 78216

ATTN: Mr. Nathan Nowell

RE: **Stone Garden - Unit 2A**
ECS Job # **20:1910**

Permits:
Location: **14395 Old Corpus Christi Road**
Elmendorf, TX 78112

X Field Reports **X** For your use **X** As requested

CC: City of San Antonio - Development Services Department - Juan Ramirez
Lennar - Rogelio "Roy" Olivarez, Jr.
V.K. Knowlton Construction - Sammy Ramos

ENCL: Field Report # 98 10/9/2025 Soil Density Testing

Adam James Heiman, P.E.
Assistant Office Manager

Stephanie Marie Chavez
CMT Project Professional I

TX Registered Engineering Firm # F-8461

ECS Southwest, LLP
431 Isom Road, Suite 114
San Antonio, TX 78216
T 210.528.1430
F 214.483.9684

FIELD REPORT

Project No.	**20:1910**
Report No.	**98**
Day & Date	**Thursday 10/9/2025**
Weather	**88 °/ Sunny**
On-Site Time	**2.00**
Lab Time	**0.00**
Travel Time*	**0.50**
Total	**2.50**
Re Obs Time	**0.00**

Project	**Stone Garden - Unit 2A**
Location	**Elmendorf, TX**
Client	**Lennar**
Contractor	**Lennar**

Remarks **Soil Density Testing**

Trip Charges*	Tolls/Parking*	Mileage*	Time of	Arrival	Departure
35.00				**9:15A**	**11:15A**
Chargeable Items **5000**					

* Travel time and mileage will be billed in accordance with the contract.

Summary of Services Performed (field test data, locations, elevations & depths are estimates) & Individuals Contacted.

The undersigned arrived on-site, as requested, to observe the compaction of the Base Material.

Location:
Hornblende Trails- STA 2+00 to 2+76.50
Giallo Place- STA 3+50
Azzuro Stone- STA 2+50 to 2+00
Basalts Garden- STA 3+50 to 5+00
Mudstone Place - STA 2+00 to 3+50
Please see the attached sketch.

Geotechnical report dated 4/25/2022 was reviewed prior to testing.

Utilizing the Nuclear Method ASTM D6938, to check the compaction of base material at the areas and elevations tested, test results met the project requirements of 95% of the corrected maximum dry density and moisture content of -2% to +3% of optimum, as determined in our laboratory using the Modified Proctor Method TEX-113-E.

Noted exceptions: City of San Antonio Inspector, Santiago Vidales, was notified of the compaction results exceeding 105% and gave ECS permission to proceed with testing observations for the road base at southern avenue of Stone garden which included Hornblende Trails, Giallo Place, Azzuro Stone, Basalts Garden, and Mudstone Place.

Prior to the technicians' departure, Sammy Ramos representing V.K. Knowlton was notified of the observations and testing performed today.

By Tyler Batungbacal 1800

Field Compaction Summary, D6938

Project No: 20:1910 Project Name: Stone Garden - Unit 2A Date: 10/9/2025

ECS Southwest, LLP

Client: Lennar

Contractor: Lennar

Technician: Tyler Batungbacal

Test Method D6938			
Nuclear Gauge No. 5403			
Make		Density Std	2924
Model		Moisture Std	687
Ser. No.	5403		

Sample No.	Description	Proctor Method	Uncorrected Max. Density	Uncorrected Optimum Moisture Content
D4S-12	**(GP-GC) POORLY GRADED GRAVEL WITH SILTY CLAY & SAND, Light Tan**	**TEX-113-E**	**137.7**	**4.5**

Test No.	Lot No.	Test Mode	Probe Depth (in.)	Station / Location	Lift / Elev	Sample No.	% Oversize	Corrected Max. Density	Corrected Optimum Moisture Content (%)	Wet Density (pcf)	Dry Density (pcf)	Moisture Content (%)	Percent Comp. (%)	P / F	Comments
1		DT	6	STA 2+00 Hornblende Trails	Final lift	D4S-12	0.00	137.7	4.5	155.5	148.6	4.6	107.9	P	
2		DT	6	STA 2+75 Hornblende Trails	Final lift	D4S-12	0.00	137.7	4.5	151.8	145.9	4.0	106.0	P	
3		DT	6	STA 2+04 Hornblende Trails	Final Lift	D4S-12	0.00	137.7	4.5	151.9	145.6	4.3	105.7	P	
4		DT	6	STA 2+00 NW of S cul-de-Saxon Hornblende Trls	Final Lift	D4S-12	0.00	137.7	4.5	156.7	149.6	4.8	108.6	P	
5		DT	6	STA 3+45 NW of E cul-de-sac Giallo Pl.	Final Lift	D4S-12	0.00	137.7	4.5	148.9	140.2	6.2	101.8	P	
6		DT	6	STA 2+00 SW of intersection/Azzuro Stone	Final lift	D4S-12	0.00	137.7	4.5	143.3	136.7	4.9	99.3	P	
7		DT	6	STA 2+00 SE OF cup -de-sac Azzuro Stone	Final Lift	D4S-12	0.00	137.7	4.5	141.7	134.8	5.1	97.9	P	
8		DT	6	STA 3+50 Basalts Garden	Final lift	D4S-12	0.00	137.7	4.5	147.5	139.3	5.9	101.2	P	
9		DT	6	5+00 Basalts Garden	Final lift	D4S-12	0.00	137.7	4.5	147.3	139.4	5.7	101.2	P	

Test Mode: DT = Direct Transmission BS = Back Scatter

WO: 46972

Field Compaction Summary, D6938

Project No: 20:1910 Project Name: Stone Garden - Unit 2A Date: 10/9/2025

ECS Southwest, LLP

Client: Lennar

Contractor: Lennar

Technician: Tyler Batungbacal

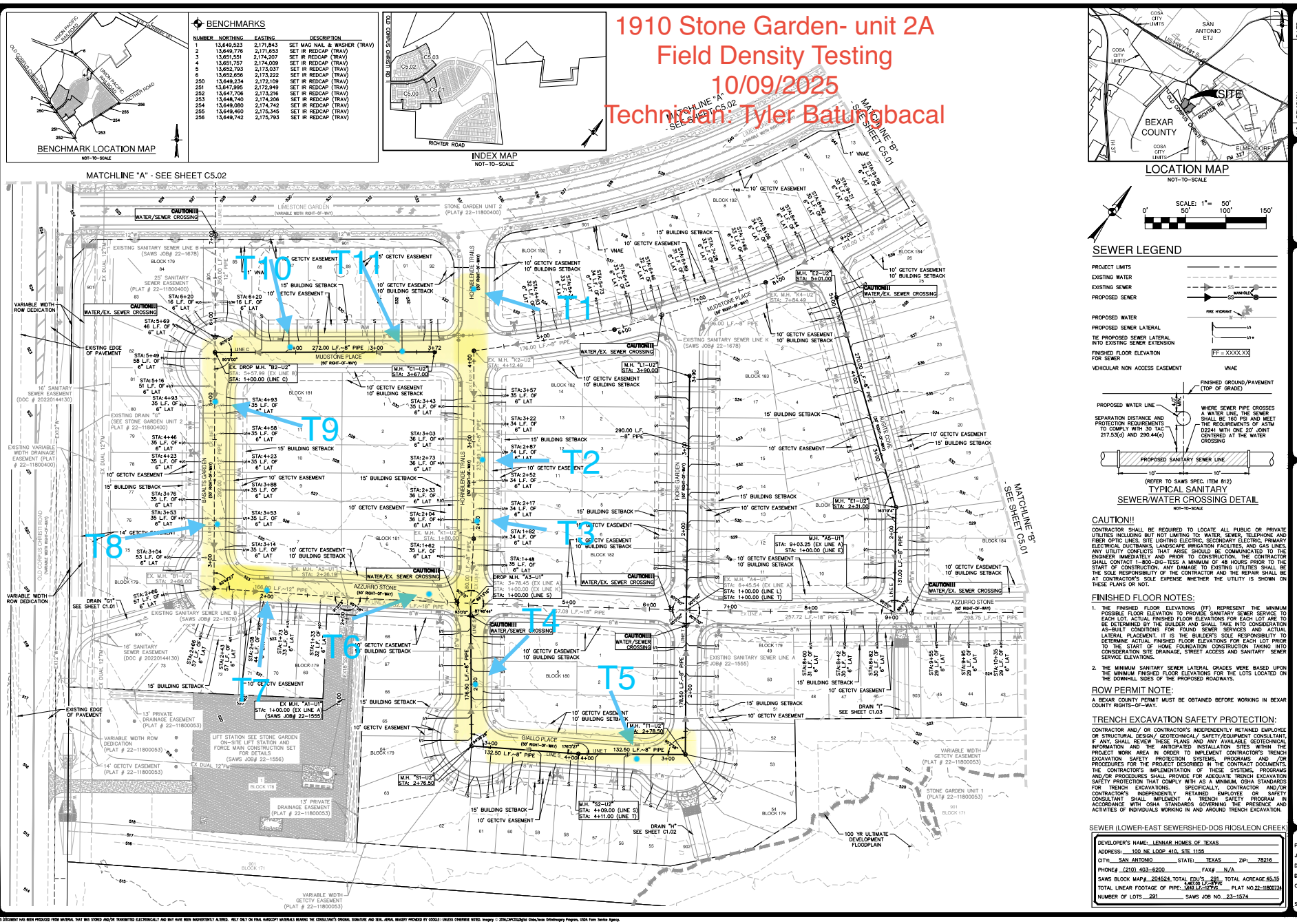
Test Method D6938			
Nuclear Gauge No. 5403			
Make		Density Std	2924
Model		Moisture Std	687
Ser. No.	5403		

Test No.	Lot No.	Test Mode	Probe Depth (in.)	Station / Location	Lift / Elev	Sample No.	% Oversize	Corrected Max. Density	Corrected Optimum Moisture Content (%)	Wet Density (pcf)	Dry Density (pcf)	Moisture Content (%)	Percent Comp. (%)	P / F	Comments
10		DT	6	STA 2+00 Mudstone Place	Final Lift	D4S-12	0.00	137.7	4.5	148.8	141.1	5.5	102.5	P	
11		DT	6	STA 3+50 Mudstone Place	Final Lift	D4S-12	0.00	137.7	4.5	148.4	141.5	4.9	102.8	P	

Test Mode: DT = Direct Transmission BS = Back Scatter

WO: 46972

1910 Stone Garden- unit 2A
Field Density Testing
10/09/2025
Technician: Tyler Baturnbacal



Attachments

Main road for testing site Hornblend

Figure 1

Roller used for compaction

Figure 2

Attachments

STA location used for testing

Figure 3

Testing site

Figure 4

TX Registered Firm # F-8461

ECS Southwest, LLP
431 Isom Road, Suite 114
San Antonio, TX 78216
T 210.528.1430
F 214.483.9684

LETTER OF TRANSMITTAL

October 30, 2025
Lennar
100 NE Loop 410 Suite 1155
San Antonio, TX 78216

ATTN: Mr. Nathan Nowell

RE: **Stone Garden - Unit 2A**
ECS Job # **20:1910**

Permits:
Location: **14395 Old Corpus Christi Road**
Elmendorf, TX 78112

X Field Reports **X** For your use **X** As requested

CC: City of San Antonio - Development Services Department - Juan Ramirez
Lennar - Rogelio "Roy" Olivarez, Jr.
V.K. Knowlton Construction - Sammy Ramos

ENCL: Field Report # 102 10/29/2025 Asphalt Testing

Adam James Heiman, P.E.
Assistant Office Manager

Stephanie Marie Chavez
CMT Project Professional I

TX Registered Engineering Firm # F-8461

ECS Southwest, LLP
431 Isom Road, Suite 114
San Antonio, TX 78216
T 210.528.1430
F 214.483.9684

FIELD REPORT

Project	**Stone Garden - Unit 2A**
Location	**Elmendorf, TX**
Client	**Lennar**
Contractor	**Lennar**

Project No.	**20:1910**
Report No.	**102**
Day & Date	**Wednesday 10/29/2025**
Weather	**60 °/ Sunny**
On-Site Time	**2.75**
Lab Time	**0.50**
Travel Time*	**1.50**
Total	**4.75**
Re Obs Time	**0.00**

Remarks **Asphalt Testing**

Trip Charges*	Tolls/Parking*	Mileage*	Times of	Arrival	Departure
35.00				**9:30A**	**10:30A**
Chargeable Items				**3:15P**	**5:00P**

* Travel time and mileage will be billed in accordance with the contract.

Summary of Services Performed (field test data, locations, elevations & depths are estimates) & Individuals Contacted.

The undersigned arrived on-site, as requested to observe the placement and compaction of type-D asphalt.

Location:
Quartz Cove
Granite Garden
Dacite Place
Chalk Cave
Gabbro Cove
Please see the attached sketch.

Geotechnical Report was referenced prior to testing and he asphalt RICE value of the day was confirmed by Hanson HMA Plant.

Utilizing the Nuclear Method ASTM D2950 to check the compaction of the asphalt; test results indicated that the compacted material, at the areas and elevations tested, met the project requirements of 92% to 97% of the maximum wet density.

The asphalt observed on this date appeared to be placed in compliance with project specifications regarding lift thickness and lay down temperature.

Prior to departure, Junior with Lone Star Paving was informed of the results of the day's testing and observations.

By Francisco Dix 1700

ECS SOUTHWEST, LLP

Asphalt Field Compaction Summary

Test Method			
Nuclear Gauge No.26193			
Make	Troxler	Density Std	1477
Model	3440-P	Moisture Std	654
Ser. No.	26193		

Project No.: 1910 Project Name: Stone Garden Unit 2A

Paving Company: Lone Star Paving Date: 10/29/25 Technician: Frankie Dix

Producer: Hanson HMA

Mix Type(s): Type-D

Density Determination: Max Theoretical Density (RICE)

General Location: Unit 2A

Asphalt Lay-down Temperature	
Maximum Recorded	259
Minimum Recorded	278

Type ID	Type Description (material, type, joint, mat, etc)	Target Density	Lower Limit (%)	Upper Limit (%)
1	Type-D	151.6	92.0	97.0
2				
3				

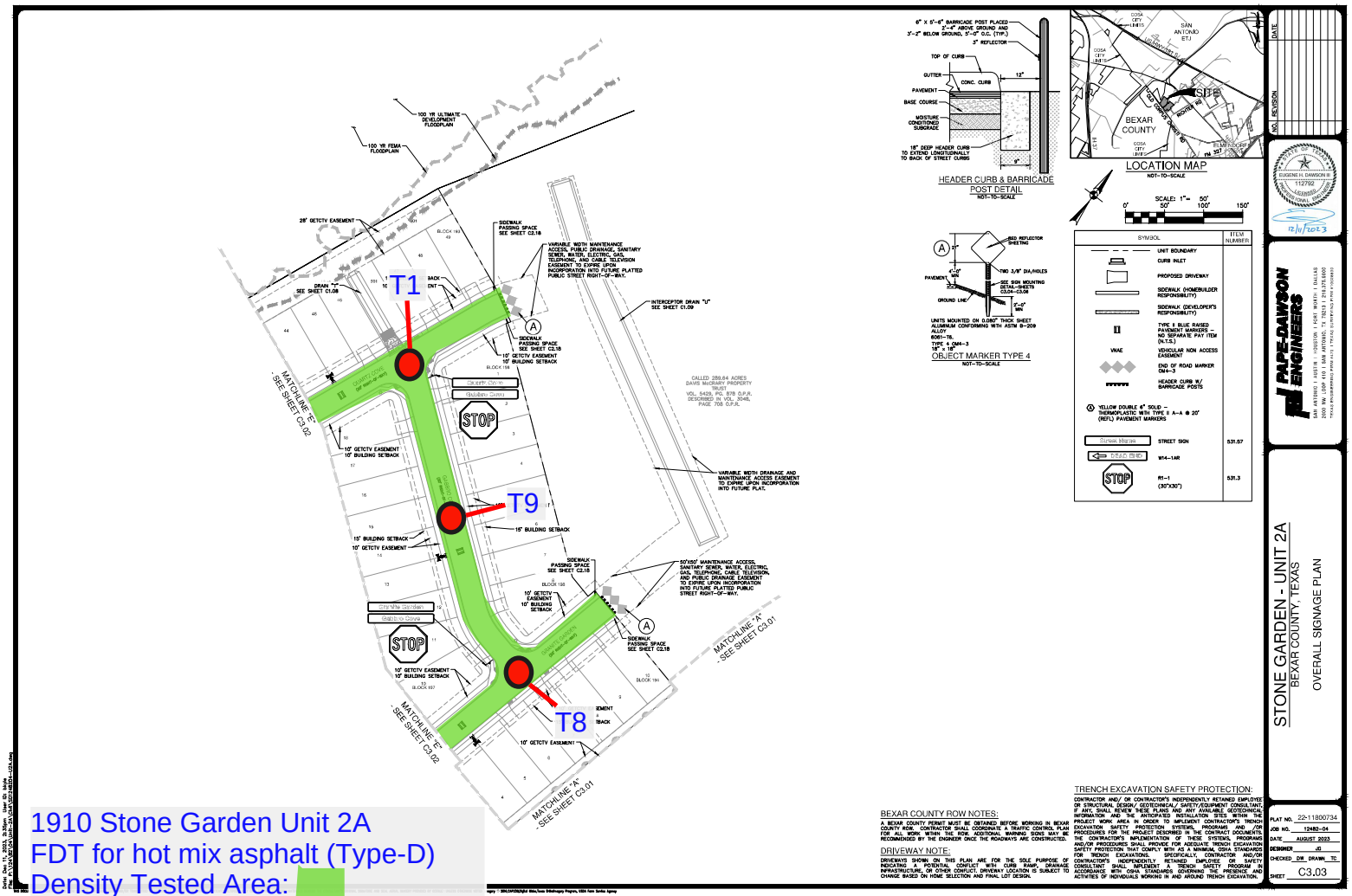
Test No.	Type ID (from table)	Station / Location	Test Data			Comments
			Wet Density (pcf)	Percent Comp. (%)	P / F	
1	1	Intersection of Gabbro Cove and Quartz Cove	144.2	95.1	P	
2	1	Intersection of Chalk Cave and Quartz Cove	146.8	96.8	P	
3	1	Intersection of Dacite Place and Quartz Cove	146.3	96.5	P	
4	1	200'NW of Granite Garden and Quartz Cove intersection	139.5	92.0	P	
5	1	Intersection of Granite Garden and Quartz Cove	144.5	95.3	P	
6	1	Intersection of Dacite Place and Granite Garden	139.7	92.2	P	
7	1	Intersection of Chalk Cave and Granite Garden	143.5	94.7	P	
8	1	Intersection of Gabbro Cove and Granite Garden	144.0	95.0	P	
9	1	Center of Gabbro Cove	145.9	96.2	P	
10	1	Center of Chalk Cave	143.0	94.3	P	
11	1	Center of Dacite Place	144.7	95.4	P	

Test Mode: Back Scatter No. of tests on sheet: 11 Total(%): 1,043.6 Average (%): 86.2

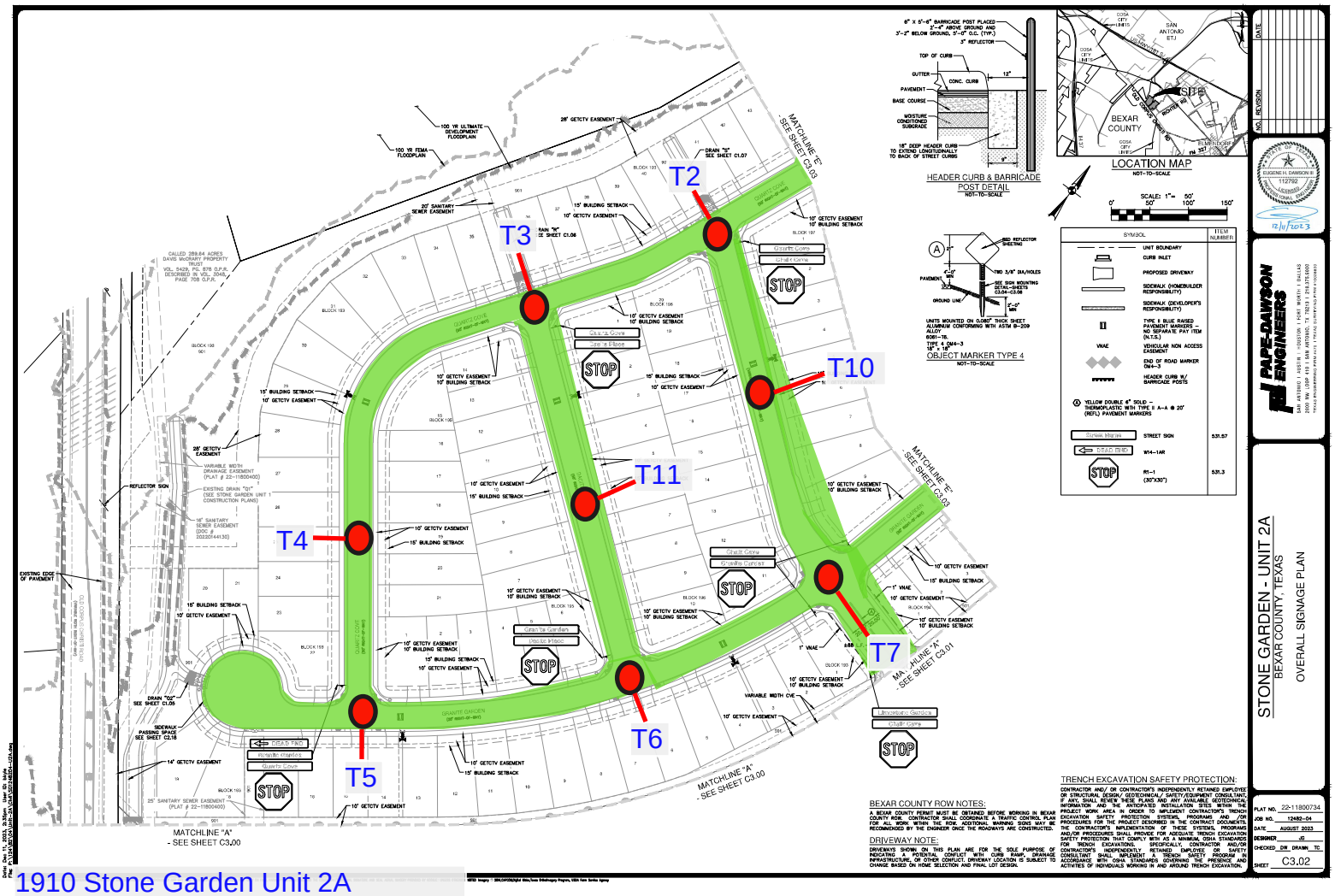
Specifications/Standards: ASTM D2950
(for nuclear method, DOT, etc)

*Please print to PDF before Attaching

Clear Form

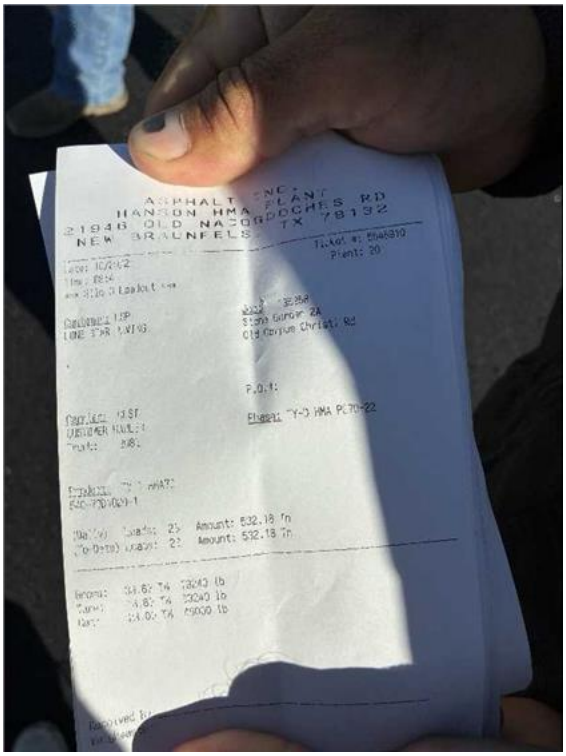


1910 Stone Garden Unit 2A
FDT for hot mix asphalt (Type-D)
Density Tested Area:
Approximate Location of Test:
10/29/25
Technician: F. Dix



1910 Stone Garden Unit 2A
FDT for hot mix asphalt (Type-D)
Density Tested Area:
Approximate Location of Test:
10/29/25
Technician: F. Dix

Attachments



Batch ticket

Figure 1

Asphalt placement in progress

Figure 2

Attachments

Compaction in progress

Figure 3

Commencing density testing for streets

Figure 4

TX Registered Firm # F-8461

ECS Southwest, LLP
431 Isom Road, Suite 114
San Antonio, TX 78216
T 210.528.1430
F 214.483.9684

LETTER OF TRANSMITTAL

November 13, 2025
Lennar
100 NE Loop 410 Suite 1155
San Antonio, TX 78216

ATTN: Mr. Nathan Nowell

RE: **Stone Garden - Unit 2A**
ECS Job # **20:1910**

Permits:
Location: **14395 Old Corpus Christi Road**
Elmendorf, TX 78112

X Field Reports **X** For your use **X** As requested

CC: City of San Antonio - Development Services Department - Juan Ramirez
Lennar - Rogelio "Roy" Olivarez, Jr.
V.K. Knowlton Construction - Sammy Ramos

ENCL: Field Report # 104 11/12/2025 Asphalt Testing & Observation

Adam James Heiman, P.E.
Assistant Office Manager

Stephanie Marie Chavez
CMT Project Professional I

TX Registered Engineering Firm # F-8461

ECS Southwest, LLP
431 Isom Road, Suite 114
San Antonio, TX 78216
T 210.528.1430
F 214.483.9684

FIELD REPORT

Project	**Stone Garden - Unit 2A**
Location	**Elmendorf, TX**
Client	**Lennar**
Contractor	**Lennar**

Project No.	**20:1910**
Report No.	**104**
Day & Date	**Wednesday 11/12/2025**
Weather	**65 °/ Sunny**
On-Site Time	**1.00**
Lab Time	**0.25**
Travel Time*	**0.50**
Total	**1.75**
Re Obs Time	**0.00**

Remarks **Asphalt Testing & Observation**

Trip Charges*	Tolls/Parking*	Mileage*	Time of	Arrival	Departure
35.00					
Chargeable Items				**11:00A**	**12:00P**

* Travel time and mileage will be billed in accordance with the contract.

Summary of Services Performed (field test data, locations, elevations & depths are estimates) & Individuals Contacted.

The undersigned arrived on-site, as requested to observe the placement and compaction of asphalt.

Location:
Chalk Cave
Azzarro Stone
Please see the attached sketch.

REFERENCE:
Civil plan page Civil plan page C2.16 dated 9/11/2023 and the Geotechnical Report dated 4/25/2022 were referenced prior to testing. The asphalt RICE value of the day was provided by Bobcat Materials Representative.

METHOD:
Utilizing the Nuclear Method ASTM D2950 to check the compaction of the asphalt; test results indicated that the compacted material, at the areas and elevations tested.

RESULTS:
The testing MET the project requirements of 92% to 97% of the maximum wet density. The asphalt observed on this date appeared to be placed in compliance with project specifications regarding lift thickness and lay down temperature.

Prior to departure, Mundy Perdin with VK Knowlton was informed of the results of the day's testing and observations.

By Abner Cordova Cedillo 1700

TX Registered Firm # F-8461

ECS GROUP OF COMPANIES

ECS SOUTHWEST, LLP

431 Isom Road, Suite 114

San Antonio, TX 78216

Asphalt Field Compaction Summary

Test Method			
Nuclear Gauge No.	26193		
Make	Troxler	Density Std	1477
Model	3440-P	Moisture Std	654
Ser. No.	26193		

Project No.: 1910 Project Name: Stone Garden Unit 2A

Paving Company: Lone Star Paving Date: 10/29/25 Technician: Frankie Dix

Producer: Hanson HMA

Mix Type(s): Type-D

Density Determination: Max Theoretical Density (RICE)

General Location: Unit 2A

Asphalt Lay-down Temperature	
Maximum Recorded	259
Minimum Recorded	278

Type ID	Type Description (material, type, joint, mat, etc)	Target Density	Lower Limit (%)	Upper Limit (%)
1	**Type-D**	**151.6**	**92.0**	**97.0**

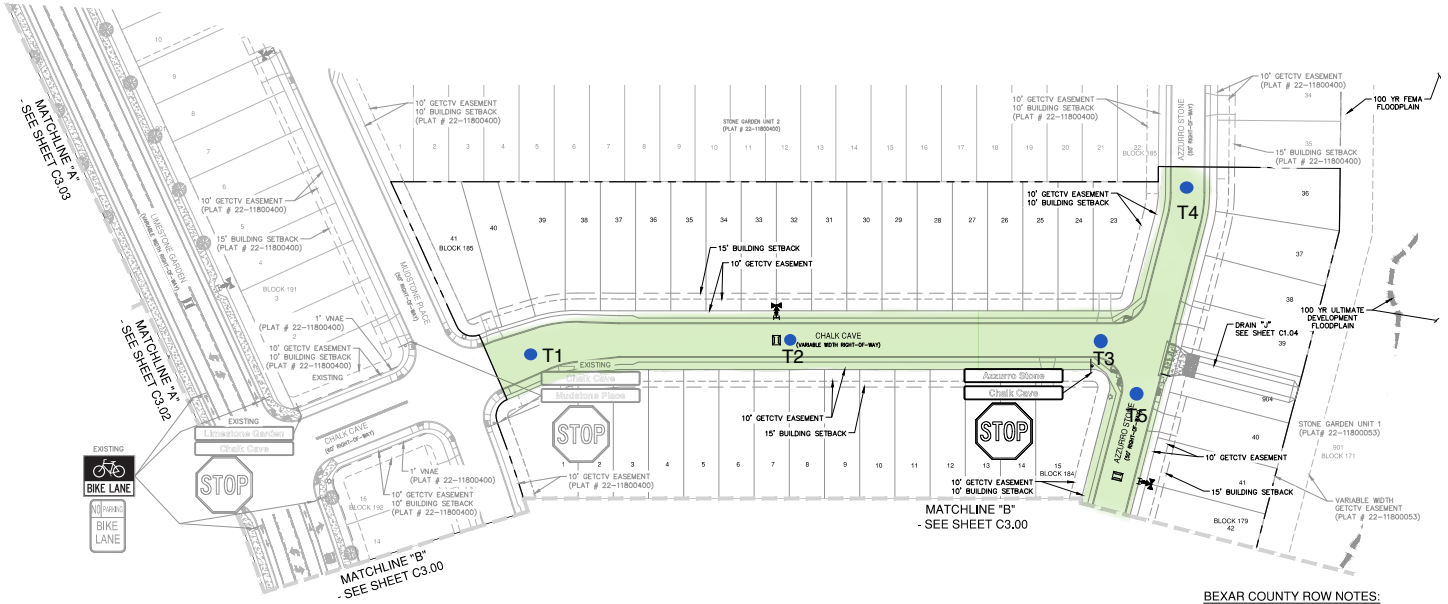
Test No.	Type ID (from table)	Station / Location	Test Data			Comments
			Wet Density (pcf)	Percent Comp. (%)	P / F	
1	1	Intersection of Gabbro Cove and Quartz Cove			P	
2	1	Intersection of Chalk Cave and Quartz Cove	146.8		P	
3	1	Intersection of Dacite Place and Quartz Cove	146.3		P	
4	1	200'NW of Granite Garden and Quartz Cove interse	139.5		P	
5	1	Intersection of Granite Garden and Quartz Cove	144.5		P	
6	1	Intersection of Dacite Place and Granite Garden	139.7		P	
7	1	Intersection of Chalk Cave and Granite Garden	143.5			
8	1	Intersection of Gabbro Cove and Granite Garden	144.0			
9	1	Center of Gabbro Cove	145.9			
10	1	Center of Chalk Cave	143.0			
11	1	Center of Dacite Place	144.7			

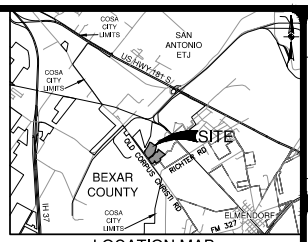
Test Mode: Back Scatter No. of tests on sheet: 11 Average (%): 94.5 Specification/Standard: ASTM D2950

NOTE: The maximum theoretical specific gravity (RICE) was provided to ECS by Frontera Materials personnel.

Clear Form

1910 Stone Garden 2A Asphalt Densities.
Density Tested Area:
Approximate location of test:
Technician Juan Abner Cordova.





SCALE: 1"= 50'
0' 50' 100' 150'

SYMBOL		ITEM NUMBER
	UNIT BOUNDARY	
	CURB INLET	
	PROPOSED DRIVEWAY	
	SIDEWALK (HOMEBUILDER RESPONSIBILITY)	
	SIDEWALK (DEVELOPER'S RESPONSIBILITY)	
	TYPE II BLUE RAISED PAVEMENT MARKERS – NO SEPARATE PAY ITEM (N.T.S.)	
VNAE	VEHICULAR NON ACCESS EASEMENT	
	END OF ROAD MARKER OM4-3	
	HEADER CURB W/ BARRICADE POSTS	
(A)	YELLOW DOUBLE 6" SOLID – THERMOPLASTIC WITH TYPE II A-A @ 20' (REFL) PAVEMENT MARKERS	
Street Name	STREET SIGN	531.57
DEAD END	W14-1AR	
STOP	R1-1 (30"X30")	531.3

BEXAR COUNTY ROW NOTES:

A BEXAR COUNTY PERMIT MUST BE OBTAINED BEFORE WORKING IN BEXAR COUNTY ROW. CONTRACTOR SHALL COORDINATE A TRAFFIC CONTROL PLAN FOR ALL WORK WITHIN THE ROW. ADDITIONAL WARNING SIGNS MAY BE RECOMMENDED BY THE ENGINEER ONCE THE ROADWAYS ARE CONSTRUCTED.

DRIVEWAY NOTE:

DRIVEWAYS SHOWN ON THIS PLAN ARE FOR THE SOLE PURPOSE OF INDICATING A POTENTIAL CONFLICT WITH CURB RAMP, DRAINAGE INFRASTRUCTURE, OR OTHER CONFLICT. DRIVEWAY LOCATION IS SUBJECT TO CHANGE BASED ON HOME SELECTION AND FINAL LOT DESIGN.

TRENCH EXCAVATION SAFETY PROTECTION:

CONTRACTOR AND/ OR CONTRACTOR'S INDEPENDENTLY RETAINED EMPLOYEE OR STRUCTURAL DESIGN/ GEOTECHNICAL/ SAFETY/EQUIPMENT CONSULTANT, IF ANY, SHALL REVIEW THESE PLANS AND ANY AVAILABLE GEOTECHNICAL INFORMATION AND THE ANTICIPATED INSTALLATION SITES WITHIN THE PROJECT WORK AREA IN ORDER TO IMPLEMENT CONTRACTOR'S TRENCH EXCAVATION SAFETY PROTECTION SYSTEMS, PROGRAMS AND /OR PROCEDURES FOR THE PROJECT DESCRIBED IN THE CONTRACT DOCUMENTS. THE CONTRACTOR'S IMPLEMENTATION OF THESE SYSTEMS, PROGRAMS AND/OR PROCEDURES SHALL PROVIDE FOR ADEQUATE TRENCH EXCAVATION SAFETY PROTECTION THAT COMPLY WITH AS A MINIMUM, OSHA STANDARDS FOR TRENCH EXCAVATIONS. SPECIFICALLY, CONTRACTOR AND/OR CONTRACTOR'S INDEPENDENTLY RETAINED EMPLOYEE OR SAFETY CONSULTANT SHALL IMPLEMENT A TRENCH SAFETY PROGRAM IN ACCORDANCE WITH OSHA STANDARDS GOVERNING THE PRESENCE AND ACTIVITIES OF INDIVIDUALS WORKING IN AND AROUND TRENCH EXCAVATION.

NO.	REVISION	DATE

STATE OF TEXAS
EUGENE H. DAWSON III
112792
LICENSED PROFESSIONAL ENGINEER
12/11/2023

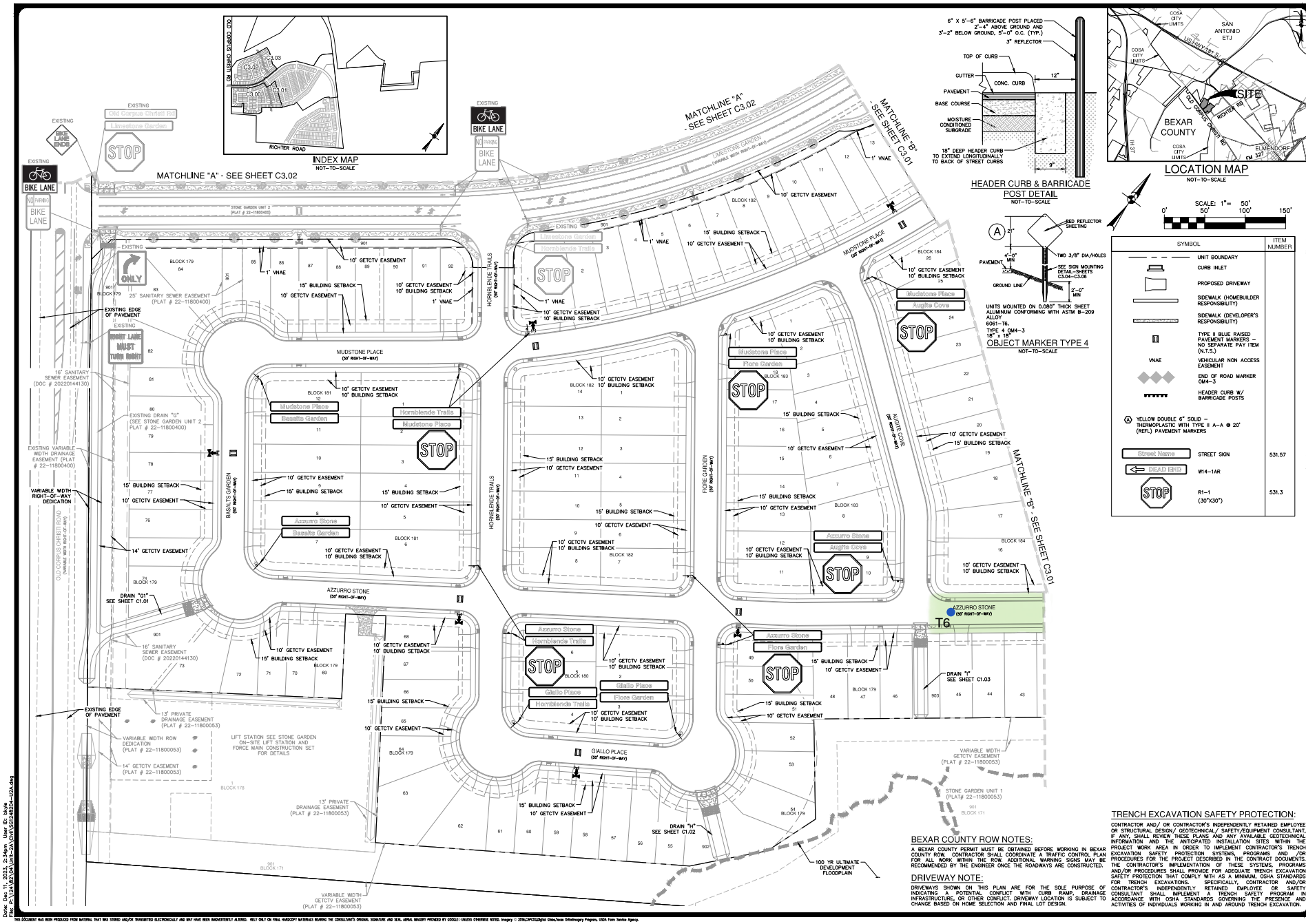
PAPE-DAWSON ENGINEERS
SAN ANTONIO | AUSTIN | HOUSTON | FORT WORTH | DALLAS
2000 NW LOOP 410 | SAN ANTONIO, TX 78213 | 210.375.9000
TEXAS ENGINEERING FIRM #470 | TEXAS SURVEYING FIRM #100288-00

STONE GARDEN - UNIT 2A
BEXAR COUNTY, TEXAS

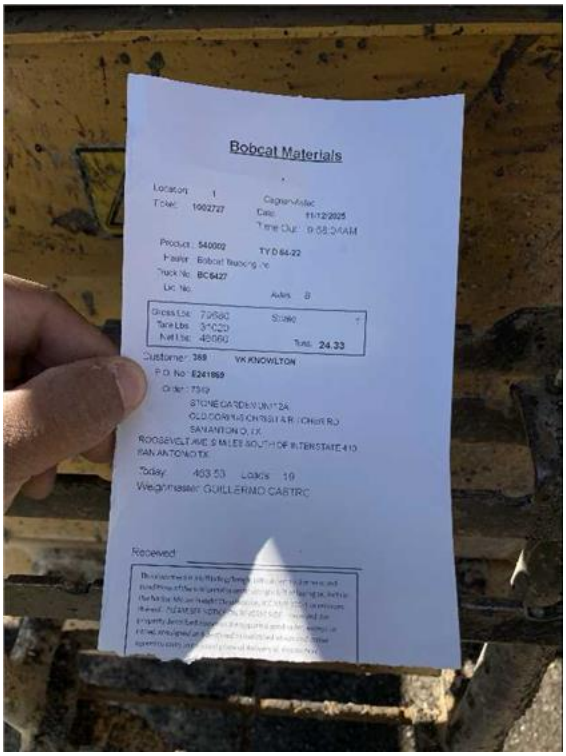
OVERALL SIGNAGE PLAN

PLAT NO. 22-11800734
JOB NO. 12482-04
DATE AUGUST 2023
DESIGNER JG
CHECKED DW DRAWN TC
SHEET C3.01

Date: Dec 11, 2023, 2:46pm User ID: alvik
File: P:\12482\04\04a\Unit-2A\Civil\SD\12482004-U2A.dwg



Attachments



Asphalt ticket

Figure 1

Asphalt densities

Figure 2

Attachments

Asphalt densities

Figure 3

Asphalt denaities

Figure 4

TX Registered Firm # F-8461

ECS Southwest, LLP
431 Isom Road, Suite 114
San Antonio, TX 78216
T 210.528.1430
F 214.483.9684

LETTER OF TRANSMITTAL

November 14, 2025
Lennar
100 NE Loop 410 Suite 1155
San Antonio, TX 78216

ATTN: Mr. Nathan Nowell

RE: **Stone Garden - Unit 2A**
ECS Job # **20:1910**

Permits:
Location: **14395 Old Corpus Christi Road**
Elmendorf, TX 78112

X Field Reports **X** For your use **X** As requested

CC: City of San Antonio - Development Services Department - Juan Ramirez
Lennar - Rogelio "Roy" Olivarez, Jr.
V.K. Knowlton Construction - Sammy Ramos

ENCL: Field Report # 105 11/13/2025 Asphalt Testing

Adam James Heiman, P.E.
Assistant Office Manager

Stephanie Marie Chavez
CMT Project Professional I

Disclaimer

1. *This report (and any attachments) shall not be reproduced except in full without prior written approval of ECS.*
2. *The information in this report relates only to the activities performed on the report date.*
3. *Where appropriate, this report includes statements as to compliance with applicable project drawings, and specifications for the activities, performed on this report date.*
4. *Incomplete or non-conforming work will be reported for future resolution.*
5. *The results of samples and/or specimens obtained or prepared for subsequent laboratory testing will be presented in separate reports/documents.*

TX Registered Engineering Firm # F-8461

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FIELD REPORT

Project	**Stone Garden - Unit 2A**
Location	**Elmendorf, TX**
Client	**Lennar**
Contractor	**Lennar**

Project No.	**20:1910**
Report No.	**105**
Day & Date	**Thursday 11/13/2025**
Weather	**70 °/ Sunny**
On-Site Time	**6.50**
Lab Time	**0.50**
Travel Time*	**1.00**
Total	**8.00**
Re Obs Time	**0.00**

Remarks **Asphalt Testing**

Trip Charges*	Tolls/Parking*	Mileage*	Time of	Arrival	Departure
35.00				**9:30A**	**4:00P**
Chargeable Items **5000**					

* Travel time and mileage will be billed in accordance with the contract.

Summary of Services Performed (field test data, locations, elevations & depths are estimates) & Individuals Contacted.

The undersigned arrived on-site, as requested to observe the placement and compaction of asphalt.

Location:
Mudstone Place
Fiore Garden
Giallo Place
Hornblende Trails
Azzurro Stone
Basalts Garden
See attached site plan.

REFERENCE:
Civil plan page Civil plan page C2.16 dated 9/11/2023 and the Geotechnical Report dated 4/25/2022 were referenced prior to testing. The asphalt RICE value of the day was provided by Bobcat Materials Representative.

METHOD:
Utilizing the Nuclear Method ASTM D2950 to check the compaction of the asphalt; test results indicated that the compacted material, at the areas and elevations tested.

RESULTS:
The testing MET the project requirements of 92% to 97% of the maximum wet density. The asphalt observed on this date appeared to be placed in compliance with project specifications regarding lift thickness and lay down temperature.

Prior to departure, Mundy Perdin with VK Knowlton was informed of the results of the day's testing and

observations.

TX Registered Firm # F-8461

ECS GROUP OF COMPANIES

ECS SOUTHWEST, LLP

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Asphalt Field Compaction Summary

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Make	Troxler	Density Std	1477
Model	3440-P	Moisture Std	654
Ser. No.	26193		

Project No.: 1910 Project Name: Stone Garden Unit 2A

Paving Company: Lone Star Paving Date: 10/29/25 Technician: Frankie Dix

Producer: Hanson HMA

Mix Type(s): Type-D

Density Determination: Max Theoretical Density (RICE)

General Location: Unit 2A

Asphalt Lay-down Temperature	
Maximum Recorded	259
Minimum Recorded	278

Type ID	Type Description (material, type, joint, mat, etc)	Target Density	Lower Limit (%)	Upper Limit (%)
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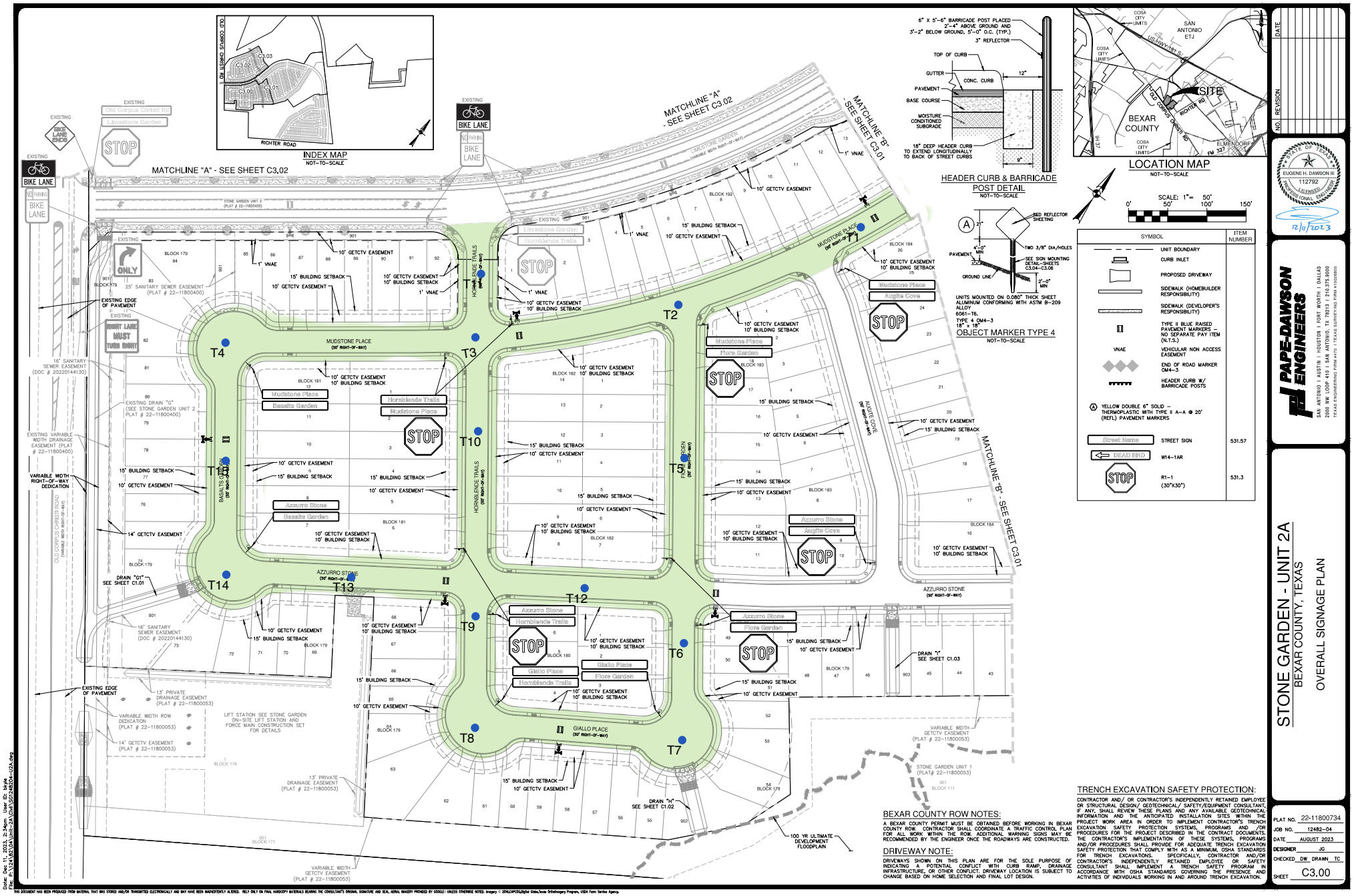
Test Mode: Back Scatter No. of tests on sheet: 11 Average (%): 94.5 Specification/Standard: ASTM D2950

NOTE: The maximum theoretical specific gravity (RICE) was provided to ECS by Frontera Materials personnel.

Clear Form

1910 Stone Garden 2A Asphalt Densities.
Density Tested Area:
Approximate location of test:
Technician Juan Abner Cordova.



Attachments

Asphalt densities

Figure 1

Asphalt densities

Figure 2

Attachments

Asphalt densities

Figure 3

Asphalt densities

Figure 4