



ENTECH
ENGINEERING, INC.

505 ELKTON DRIVE
COLORADO SPRINGS, CO 80907
PHONE (719) 531-5599
FAX (719) 531-5238

August 25, 2021

FLRD #6
2138 Flying Horse Club Drive
Colorado Springs, CO 80921

Attn: Jim Boulton

Re: Density Testing – Sanitary Sewer
Forest Lakes Residential Development, Filing 6
Colorado Springs, Colorado
Report No. 8, Tests 134 – 183

Dear Mr. Boulton,

As requested, personnel of Entech Engineering, Inc. have performed density testing at the above referenced site.

Density testing on this site was performed on July 26, 2021 – July 31, 2021. The density testing indicates that the materials have been adequately compacted at the depths and in the locations noted. Results of the density tests are enclosed with this letter.

We trust that this has provided you with the information you require. Should you have any questions or need further information, please do not hesitate to contact us.

Respectfully Submitted,

ENTECH ENGINEERING, INC.



Mark H. Hauschild, P.E.
Senior Engineer

JCG/kw

Enclosure

Entech Job No. 201326
F:\AA\projects\2020\201326-FLRD-Forest Lakes F6-110-ConMat\201326_2cl8.doc

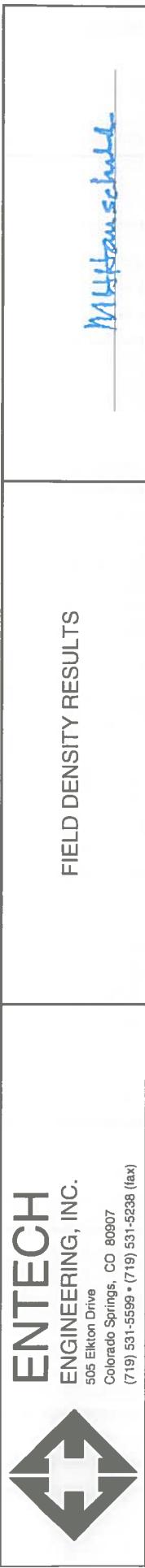
Client: FLRD #6		Entech Job #: 201326.2		Proctor Value Key: M = modified, ASTM D-1557 S = standard, ASTM D-698 T = AASHTO, T-180
Project: Forest Lakes Residential Development, Filing 6	Tested By: J. Claton			
Subject: Sanitary Sewer	Report Date: 10-16-2021			

Test #	Test Location	Testing Date	Percent Compaction	Percent Required	Percent Moisture	Soil Type	Proctor Type/Value	Pass/Fail <input checked="" type="checkbox"/> = Pass <input type="checkbox"/> = Fail
134	Main - Station 5 + 25 on Timber Trek Way. 12' below grade.	7/26/21	99	98	7.8	SM	M - 130.3 @ 7.6	<input type="checkbox"/>
135	Main - Station 5 + 25 on Timber Trek Way. 10' below grade.	7/26/21	98	98	6.5	SM	M - 130.3 @ 7.6	<input type="checkbox"/>
136	Main - Station 5 + 25 on Timber Trek Way. 8' below grade.	7/26/21	96	95	7.1	SM	M - 130.3 @ 7.6	<input type="checkbox"/>
137	Main - Station 5 + 25 on Timber Trek Way. 6' below grade.	7/26/21	97	95	7.0	SM	M - 130.3 @ 7.6	<input type="checkbox"/>
138	Sanitary Service - Lot 57 on Timber Trek Way, 8' below grade.	7/26/21	97	95	6.8	SM	M - 130.3 @ 7.6	<input type="checkbox"/>
139	Sanitary Service - Lot 57 on Timber Trek Way, 6' below grade.	7/26/21	96	95	6.6	SM	M - 130.3 @ 7.6	<input type="checkbox"/>
140	Sanitary Service - Lot 65 on Timber Trek Way, 8' below grade.	7/26/21	99	95	6.2	SM	M - 130.3 @ 7.6	<input type="checkbox"/>
141	Sanitary Service - Lot 65 on Timber Trek Way, 6' below grade.	7/26/21	98	95	6.0	SM	M - 130.3 @ 7.6	<input type="checkbox"/>
142	Sanitary Main - Station 5 + 25 on Timber Trek Way, 4' below grade.	7/27/21	97	95	7.4	SM	M - 130.3 @ 7.6	<input type="checkbox"/>
143	Sanitary Main - Station 5 + 25 on Timber Trek Way, 2' below grade.	7/27/21	98	95	7.3	SM	M - 130.3 @ 7.6	<input type="checkbox"/>

Comments:

Scope of Observation: PERIODIC; CONTRACTOR'S OR CLIENT'S REPRESENTATIVE ADVISED

All dimensions are approximate. Cl. = Centerline



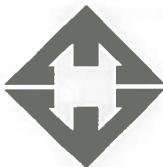
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Subject:	Sanitary Sewer	Report Date:	T = AASHTO, T-180 10-16-2021

Test #	Test Location	Testing Date	Percent Compaction	Percent Required	Percent Moisture	Soil Type	Proctor Type/Value	Pass/Fail ✓ = Fail
144	Sanitary Main - Station 5 + 25 on Timber Trek Way, at grade.	7/27/21	96	95	8.2	SM	M - 130.3 @ 7.6	<input type="checkbox"/>
145	Sanitary Service - Lot 57 on Timber Trek Way, 4' below grade.	7/27/21	97	95	8.7	SM	M - 130.3 @ 7.6	<input type="checkbox"/>
146	Sanitary Service - Lot 57 on Timber Trek Way, 2' below grade.	7/27/21	95	95	6.9	SM	M - 130.3 @ 7.6	<input type="checkbox"/>
147	Sanitary Service - Lot 57 on Timber Trek Way, at grade.	7/27/21	96	95	6.3	SM	M - 130.3 @ 7.6	<input type="checkbox"/>
148	Sanitary Service - Lot 65 on Timber Trek Way, 4' below grade.	7/27/21	99	95	5.8	SM	M - 130.3 @ 7.6	<input type="checkbox"/>
149	Sanitary Service - Lot 65 on Timber Trek Way, 2' below grade.	7/27/21	99	95	6.6	SM	M - 130.3 @ 7.6	<input type="checkbox"/>
150	Sanitary Service - Lot 65 on Timber Trek Way, at grade.	7/27/21	99	95	7.3	SM	M - 130.3 @ 7.6	<input type="checkbox"/>
151	Sanitary Service - Lot 63 on Timber Trek Way, 10' below grade.	7/28/21	99	98	7.4	SM	M - 130.3 @ 7.6	<input type="checkbox"/>
152	Sanitary Service - Lot 63 on Timber Trek Way, 8' below grade.	7/28/21	98	95	8.7	SM	M - 130.3 @ 7.6	<input type="checkbox"/>
153	Sanitary Service - Lot 63 on Timber Trek Way, 6' below grade.	7/28/21	97	95	9.1	SM	M - 130.3 @ 7.6	<input type="checkbox"/>

Comments:

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FIELD DENSITY RESULTS

Mittelschule

Client:	FLRD #6	Entech Job #:	201326.2	Proctor Value Key:
Project:	Forest Lakes Residential Development, Filing 6	Tested By:	J. Claton	M = modified, ASTM D-1557
Subject:	Sanitary Sewer	Report Date:	10-16-2021	S = standard, ASTM D-698 T = AASHTO, T-180

Test #	Test Location	Testing Date	Percent Compaction	Percent Required	Percent Moisture	Soil Type	Proctor Type/Value	Pass/Fail
154	Sanitary Service - Lot 64 on Timber Trek Way, 10' below grade.	7/28/21	99	98	7.5	SM	M - 130.3 @ 7.6	<input type="checkbox"/>
155	Sanitary Service - Lot 64 on Timber Trek Way, 8' below grade.	7/28/21	96	95	6.9	SM	M - 130.3 @ 7.6	<input type="checkbox"/>
156	Sanitary Service - Lot 64 on Timber Trek Way, 6' below grade.	7/28/21	98	95	6.7	SM	M - 130.3 @ 7.6	<input type="checkbox"/>
157	Sanitary Service - Lot 58 on Timber Trek Way, 10' below grade.	7/28/21	98	98	8.2	SM	M - 130.3 @ 7.6	<input type="checkbox"/>
158	Sanitary Service - Lot 58 on Timber Trek Way, 8' below grade.	7/28/21	97	95	7.3	SM	M - 130.3 @ 7.6	<input type="checkbox"/>
159	Sanitary Service - Lot 58 on Timber Trek Way, 6' below grade.	7/28/21	95	95	6.0	SM	M - 130.3 @ 7.6	<input type="checkbox"/>
160	Sanitary Service - Lot 63 on Timber Trek Way, 4' below grade.	7/29/21	98	95	5.9	SM	M - 130.3 @ 7.6	<input type="checkbox"/>
161	Sanitary Service - Lot 63 on Timber Trek Way, 2' below grade.	7/29/21	97	95	6.2	SM	M - 130.3 @ 7.6	<input type="checkbox"/>
162	Sanitary Service - Lot 63 on Timber Trek Way, at grade.	7/29/21	95	95	6.5	SM	M - 130.3 @ 7.6	<input type="checkbox"/>
163	Sanitary Service - Lot 64 on Timber Trek Way, 4' below grade.	7/29/21	95	95	7.1	SM	M - 130.3 @ 7.6	<input type="checkbox"/>

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Test #	Test Location	Testing Date	Percent Compaction	Percent Required	Percent Moisture	Soil Type	Type/Value	Proctor	Pass/Fail
164	Sanitary Service - Lot 64 on Timber Trek Way, 2' below grade.	7/29/21	98	95	6.0	SM	M - 130.3 @ 7.6	<input type="checkbox"/>	<input checked="" type="checkbox"/> = Fail
165	Sanitary Service - Lot 64 on Timber Trek Way, at grade.	7/29/21	99	95	5.8	SM	M - 130.3 @ 7.6	<input type="checkbox"/>	
166	Sanitary Service - Lot 58 on Timber Trek Way, 4' below grade.	7/29/21	97	95	7.7	SM	M - 130.3 @ 7.6	<input type="checkbox"/>	
167	Sanitary Service - Lot 58 on Timber Trek Way, 2' below grade.	7/29/21	97	95	7.4	SM	M - 130.3 @ 7.6	<input type="checkbox"/>	
168	Sanitary Service - Lot 58 on Timber Trek Way, at grade.	7/29/21	97	95	8.2	SM	M - 130.3 @ 7.6	<input type="checkbox"/>	
169	Sanitary Service - Lot 61 on Timber Trek Way, 12' below grade.	7/30/21	98	98	6.8	SM	M - 130.3 @ 7.6	<input type="checkbox"/>	
170	Sanitary Service - Lot 61 on Timber Trek Way, 10' below grade.	7/30/21	98	98	6.7	SM	M - 130.3 @ 7.6	<input type="checkbox"/>	
171	Sanitary Service - Lot 61 on Timber Trek Way, 8' below grade.	7/30/21	97	95	7.2	SM	M - 130.3 @ 7.6	<input type="checkbox"/>	
172	Sanitary Service - Lot 61 on Timber Trek Way, 6' below grade.	7/30/21	97	95	7.1	SM	M - 130.3 @ 7.6	<input type="checkbox"/>	
173	Sanitary Service - Lot 62 on Timber Trek Way, 12' below grade.	7/30/21	96	98	7.4	SM	M - 130.3 @ 7.6	<input type="checkbox"/>	

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Test #	Test Location	Testing Date	Percent Compaction	Percent Required	Percent Moisture	Soil Type	Type/Value	Proctor Type/Value	Pass/Fail
174	Sanitary Service - Lot 62 on Timber Trek Way, 10' below grade.	7/30/21	97	98	7.9	SM	M - 130.3 @ 7.6		
175	Sanitary Service - Lot 62 on Timber Trek Way, 8' below grade.	7/30/21	95	95	8.3	SM	M - 130.3 @ 7.6		
176	Sanitary Service - Lot 62 on Timber Trek Way, 6' below grade.	7/30/21	96	95	6.4	SM	M - 130.3 @ 7.6		
177	Sanitary Main - Station 3 + 50 on Timber Trek Way, 12' below grade.	7/30/21	99	98	6.8	SM	M - 130.3 @ 7.6		
178	Sanitary Main - Station 3 + 50 on Timber Trek Way, 10' below grade.	7/30/21	99	98	7.2	SM	M - 130.3 @ 7.6		
179	Sanitary Main - Station 3 + 50 on Timber Trek Way, 8' below grade.	7/30/21	97	95	8.3	SM	M - 130.3 @ 7.6		
180	Sanitary Main - Station 3 + 50 on Timber Trek Way, 6' below grade.	7/30/21	95	95	8.5	SM	M - 130.3 @ 7.6		
181	Sanitary Main - Station 3 + 50 on Timber Trek Way, 4' below grade.	7/31/21	96	95	7.9	SM	M - 130.3 @ 7.6		
182	Sanitary Main - Station 3 + 50 on Timber Trek Way, 2' below grade.	7/31/21	97	95	7.6	SM	M - 130.3 @ 7.6		
183	Sanitary Main - Station 3 + 50 on Timber Trek Way, at grade.	7/31/21	97	95	7.4	SM	M - 130.3 @ 7.6		

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M. Hanschell