

Vehicular Rolling Load Testing

Model Tested: 1 1/8" GridLine 2 G6P

Test Date: January 22, 2026

Type of Test: Rolling Load

Project#: CSCT-25-003

Test Location: Milton, PA

Test Standard: None

Test Report#: 25-003-01

This testing was conducted to evaluate the effects of a vehicle driving across Model 1 1/8" GridLine 2 G6P at low speed. As there is no known or established national test standard for this application, this testing was conducted under the procedures described within. For this evaluation, a 1,750 lb. wheel load was applied. (The 1,750 lb. tire load represents the weight of a 7,000 lb. vehicle with the load divided over (4) wheels.) Under these procedures, 1 1/8" GridLine 2 G6P demonstrated the ability to withstand the vehicular rolling load stresses without sustaining any significant damage or deformation that results in failure of the product.

Test Procedure

A 24"(61cm) wide x 30"(76.2cm) long/traffic direction sample of 1 1/8" GridLine 2 G6P was provided by CS EFS. The sample was of standard design and contained no modifications. Standard "hold down plates" were also included at each corner and were utilized for installation.

A wood platform was constructed for installation of the sample and included a 1 1/8" recess to receive the sample. (See drawings.) The sample was placed into the recess in the wood platform and was anchored with screws at each hold down plate.

The wood platform/sample assembly was placed into position adjacent to the CS Cycling Machine with wood blocking installed to prevent the platform from moving during testing.

The C/S Rolling Load Cart was attached to the Cycling Machine and positioned over the test sample. A concrete filled barrel was placed onto the cart to apply a 1,750 lb. load at the tire. The cart is fitted with a light-duty truck wheel/tire. (Prior to the positioning of the wood platform/assembly in position, the Cart was attached to the Cycling Machine. The tire of the cart was positioned on a shipping scale to confirm load weight. The weight barrel was placed on the cart, and the position of the barrel was adjusted until a tire load of 1,750 lbs. was achieved.)

The Cycling Machine was programmed to drive the Load Cart back-and-forth over the 1 1/8" GridLine 2 G6P sample along the traffic direction centerline. A total of 1,000 passes were conducted. Testing was stopped periodically to observe and/or inspect the sample for performance. These observations are noted and included in this report.

At the conclusion of the 1,000 passes the sample was removed and inspected for any damage and/or permanent deformation that would negatively affect its performance. All details pertaining to the test and the results are included in the following photos and attachments. The testing was also recorded with video which is available upon request.

Testing was conducted and witnessed by CS EJC Engineering, Roger Barr and Daniel Wright. Report prepared by Roger Barr, 1/27/26.

Vehicular Rolling Load Testing

A copy of this report will be retained by Construction Specialties, Inc. Results obtained are tested values and were secured by using the designated test methods. This report is exclusive property of Construction Specialties, Inc. and relates only to the specimens tested and listed in this report. This report may not be reproduced, except in full, without the written approval of Construction Specialties, Inc.

For CONSTRUCTION SPECIALTIES, INC.

Roger W. Barr
EJC Testing Manager

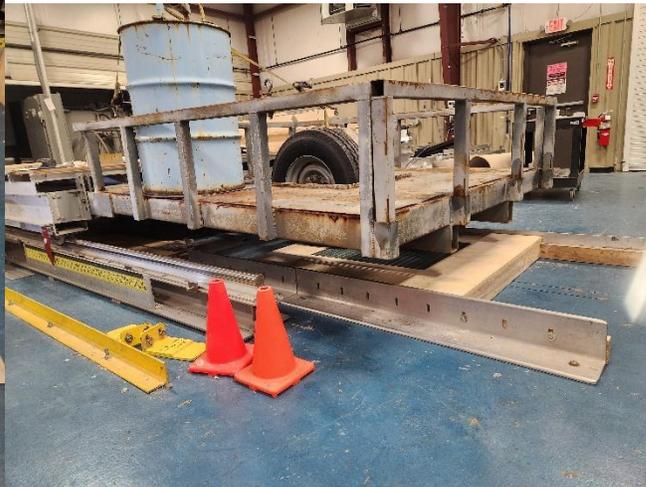
Tim Fisher
EJC Engineering Manager

Vehicular Rolling Load Testing

Photos:



Load Verification

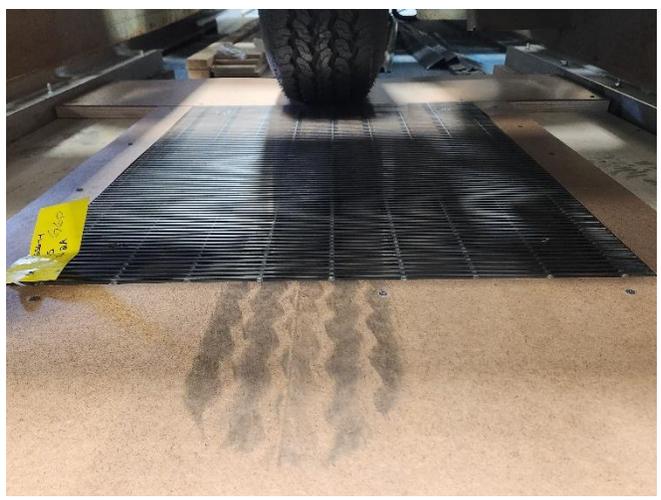


General Test Setup (3/4" Peditred G4 shown for reference)

Vehicular Rolling Load Testing



General Test Setup (3/4" Peditred G4 shown for reference)



After (20) Passes

Vehicular Rolling Load Testing



After (100) Passes



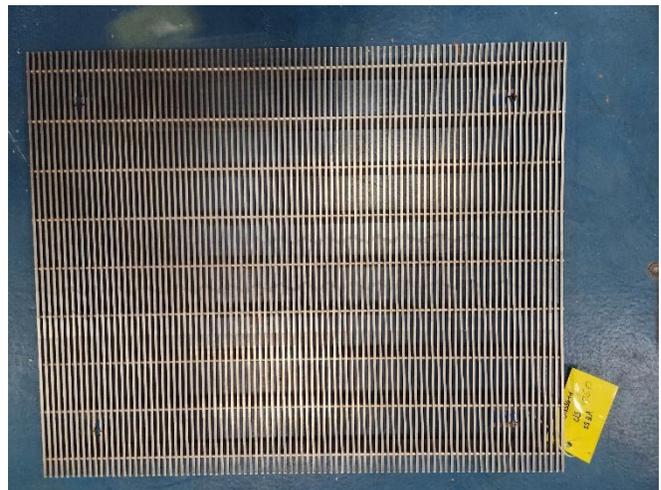
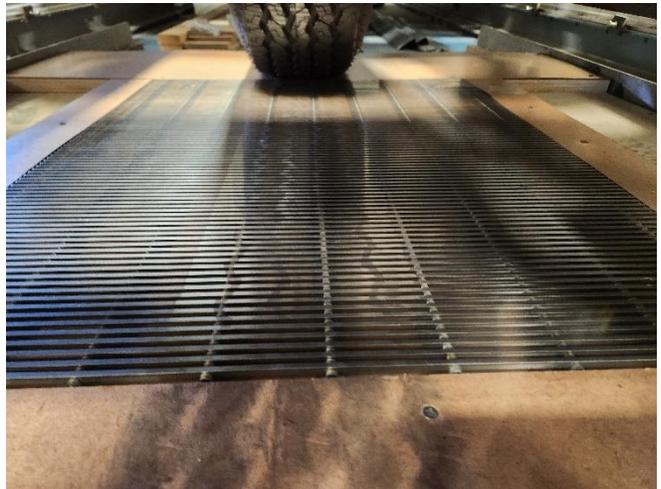
After (500) Passes



Vehicular Rolling Load Testing



After (500) Passes



Vehicular Rolling Load Testing



After (1000) Passes

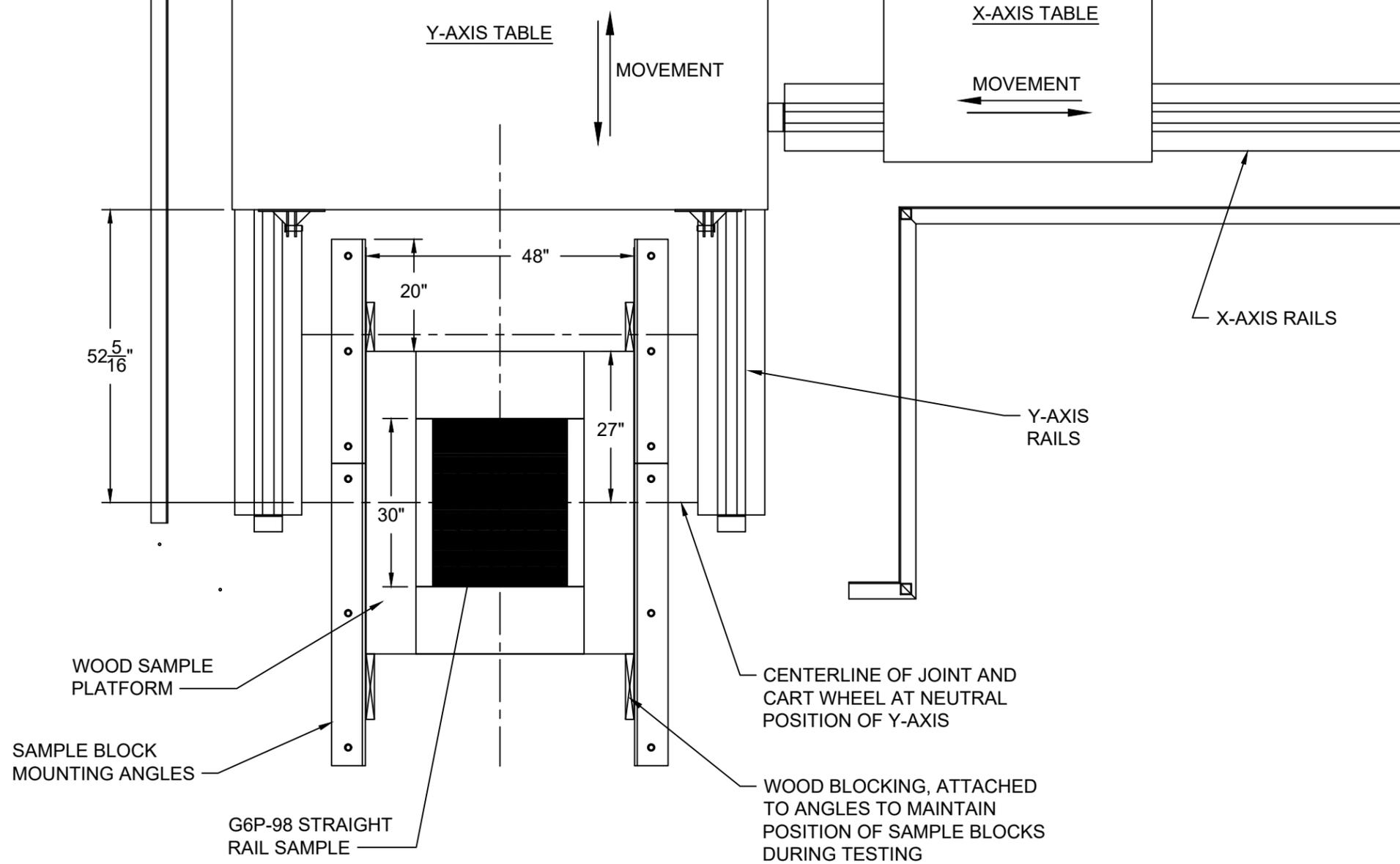
C/S EJC ROLLING LOAD TEST

Rolling Load Test Observation Sheet

Project #:	CSCT-25-003	Test ID/#:	25-003-01
Test Start Date:	1/22/2026	Test End Date:	1/22/2026
EFS Model:	Gridline 2 G6P-98		
Note Modifications from Standard Model:			
Wheel Load Applied:	1,750 Lbs.	Verified Weight:	1,750 Lbs.
Travel Distance (+/-in.):	40"	Travel Speed (in./sec.):	12
Program Dim. (Black Scale):	Retract: 22.000	Extend: 62.000	
Installation Notes: (Cure Time, Mounting Block Type, Deflection Pad...)	A 30" L (traffic dir.) x 24" W sample of EFS model G6P-98 Gridline 2 is installed into a 1 1/8" deep recess in a wood construction platform. The sample is anchored at each corner with standard hold down plates. Top surface of wood platform is flush with sample surface.		
Number of Passes Completed (Cycles)	Observations		
20(10)	20 - No visible change.		
100(40)	100 - Light tire tread pattern on the surface. No visible deflection during movement.		
500(200)	500 - The tire tread pattern is more visible. Checked the top surface flatness with a straight edge. No deflection was seen. Note: 10 cycles = 1min 12.47sec. (7.247 sec/cyc.)		
1,000(250)	1,000 - The tire tread pattern is similar. No other visible concerns are noted.		
Additional Notes:			
Post Test Notes:	At the completion of the 1,000 passes, the sample was removed for inspection. A straight edge was again placed along the bottom of a rail, no deflection was noted. There is no notable damage or issues. The surface of the sample was wiped with a clean rag with all-purpose cleaner. The tire tread pattern was removed. The product remains serviceable.		
Technician Initials:	R. Barr		
Date:	1/22/2026		

TEST 25-003-01 PLAN
 - ROLLING LOAD TEST WITH
 PASSINGER LIGHT TRUCK
 WHEEL/TIRE MOUNTED ON ROLLING
 LOAD CART.
 - THE WHEEL LOAD ON THE
 SURFACE OF THE SAMPLE TO BE
 APPROX. 1750 LBS.
 - CART TO BE MOVE BACK AND
 FORTH OVER THE TEST SAMPLE
 500 TIME EQUALING 1,000 TOTAL
 PASSES.
 - PASSES TO BE CONDUCTED IN 250
 PASS INCREMENTS. AT THE
 COMPLETION OF EACH INCREMENT
 OBSERVATIONS WILL BE
 RECORDED AND PHOTOGRAPHS
 TAKEN.
 - AT THE CONCLUSION OF THE 1,000
 PASSES THE COVER WILL BE
 DISASSEMBLED AND OBSERVATION
 RECORDED.
 - A FINAL REPORT WILL THEN BE
 COMPILED.
 - PORTIONS OF THE TESTING WILL
 ALSO BE VIDEO RECORDED.

CART NOT SHOWN FOR CLARITY.
 SEE PAGE 2.



**MODEL G6P-98 STRAIGHT RAIL
 ROLLING LOAD TESTING
 SAMPLE INSTALLATION LAYOUT
 SCALE: 1/2" = 1'**

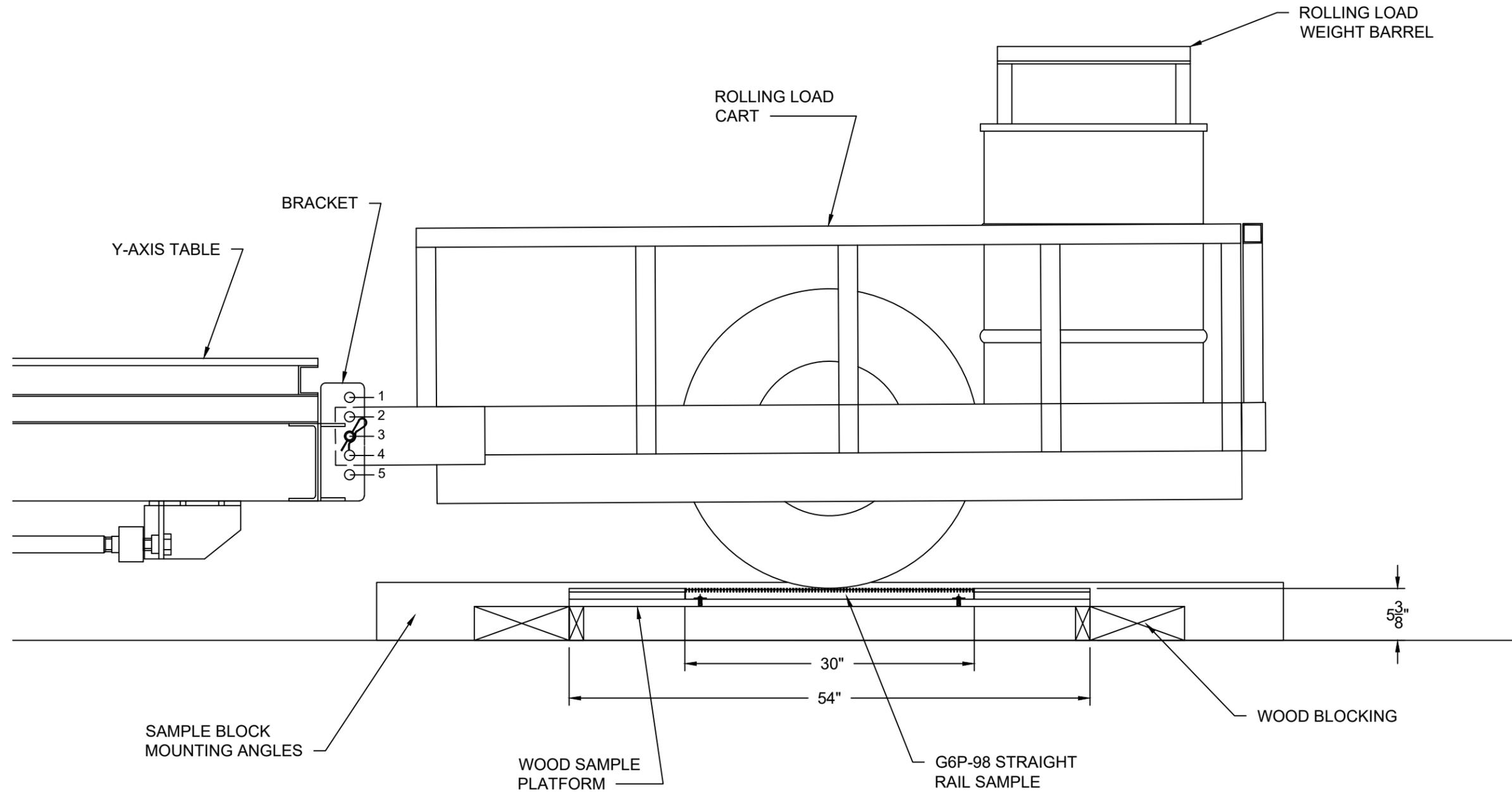
R:_E\J\CS Projects\CS Cycle Testing (CSCT)\2025\CSCT-25-003 (EFS Rolling Load Testing)\Test Dwg - Forms - Photos\Test 25-003-01 (G6P-98 Gridline 2)\9-30-25 Test 25-003-01 Prop Dwg.dwg, 3/27/2007 10:46 AM, Roger Barr

This document is the property of CONSTRUCTION SPECIALTIES, INC. and contains CONFIDENTIAL PROPRIETARY INFORMATION that is not to be disclosed to third parties, and is, not to be used without approval in writing from CONSTRUCTION SPECIALTIES, INC.

Construction Specialties
 6696 Route 405 Highway
 Muncy, PA 17766
 (607) 235-6463
 Fax: 570-546-8022
 www.c-sgroup.com

DESCRIPTION:
 ROLLING LOAD TESTING LAYOUT
 MODEL: G6P-98 STRAIGHT RAIL
 PASSINGER LIGHT TRUCK TIRE
 PROJECT NO.: CSCT-25-003

A	REVISED		RB	9/30/25	APPD BY:
					DWG BY: RB
					DATE: 9/30/25
REV	DESCRIPTION	SHT	BY	DATE	DRAWING NO.:
REVISION HISTORY					25-003-01
PART NUMBER:					SHT. 1 OF 5



**MODEL G6P-98 STRAIGHT RAIL
ROLLING LOAD TESTING
SAMPLE INSTALLATION LAYOUT
SCALE: 1:16**

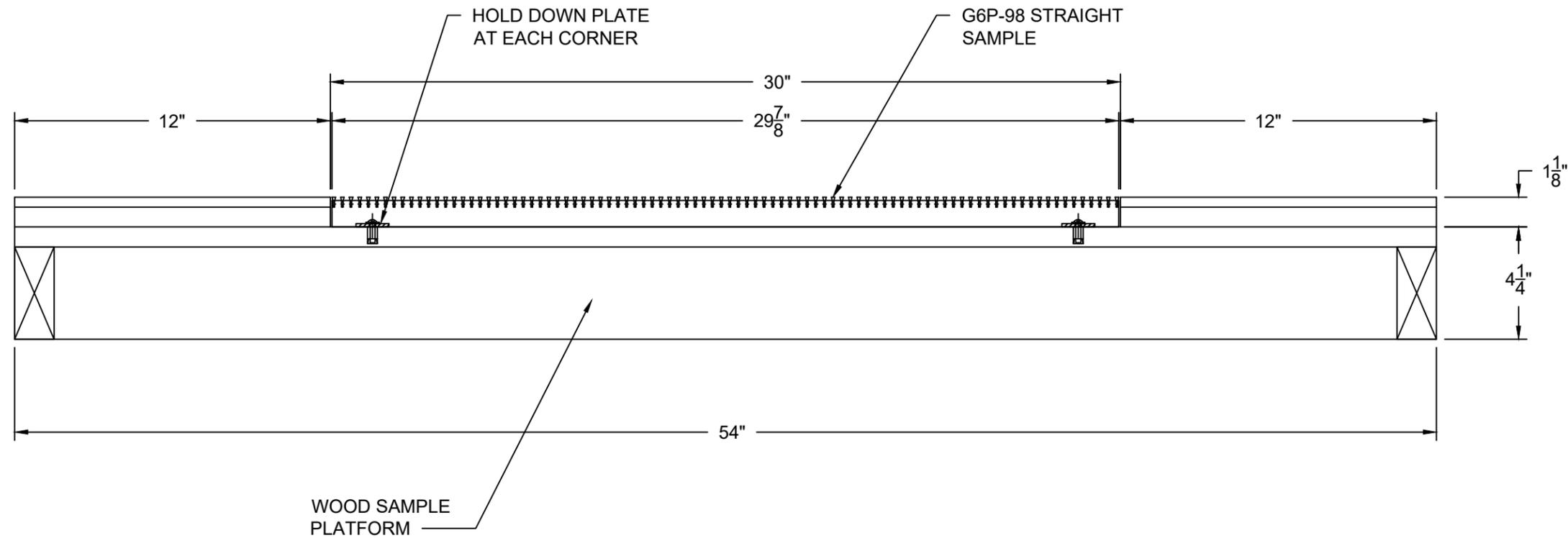
R:_E\J\CS Cycle Testing (CSCT)\2025\CSCT-25-003 (EFS Rolling Load Testing)\Test Dwg - Forms - Photos\Test 25-003-01 (G6P-98 Gridline 2)\9-30-25 Test 25-003-01 Prop Dwg.dwg, 3/27/2007 10:46 AM, Roger Barr

This document is the property of CONSTRUCTION SPECIALTIES, INC. and contains CONFIDENTIAL PROPRIETARY INFORMATION that is not to be disclosed to third parties, and is not to be used without approval in writing from CONSTRUCTION SPECIALTIES, INC.

CS
Construction Specialties
6666 Route 405 Highway
Muncy, PA 17766
(610) 235-6463
Fax: 570-546-8022
www.c-sgroup.com

DESCRIPTION:
ROLLING LOAD TESTING LAYOUT
MODEL: G6P-98 STRAIGHT RAIL
PASSINGER LIGHT TRUCK TIRE
PROJECT NO.: CSCT-25-003

A	REVISED		RB	9/30/25	APPD BY:
					DWG BY: RB
					DATE: 9/30/25
REV	DESCRIPTION	SHT	BY	DATE	DRAWING NO.:
REVISION HISTORY					25-003-01
PART NUMBER:					SHT. 2 OF 5



MODEL G6P-98 STRAIGHT RAIL
 ROLLING LOAD TESTING
 MOUNTING DETAIL
 SCALE: 1:5

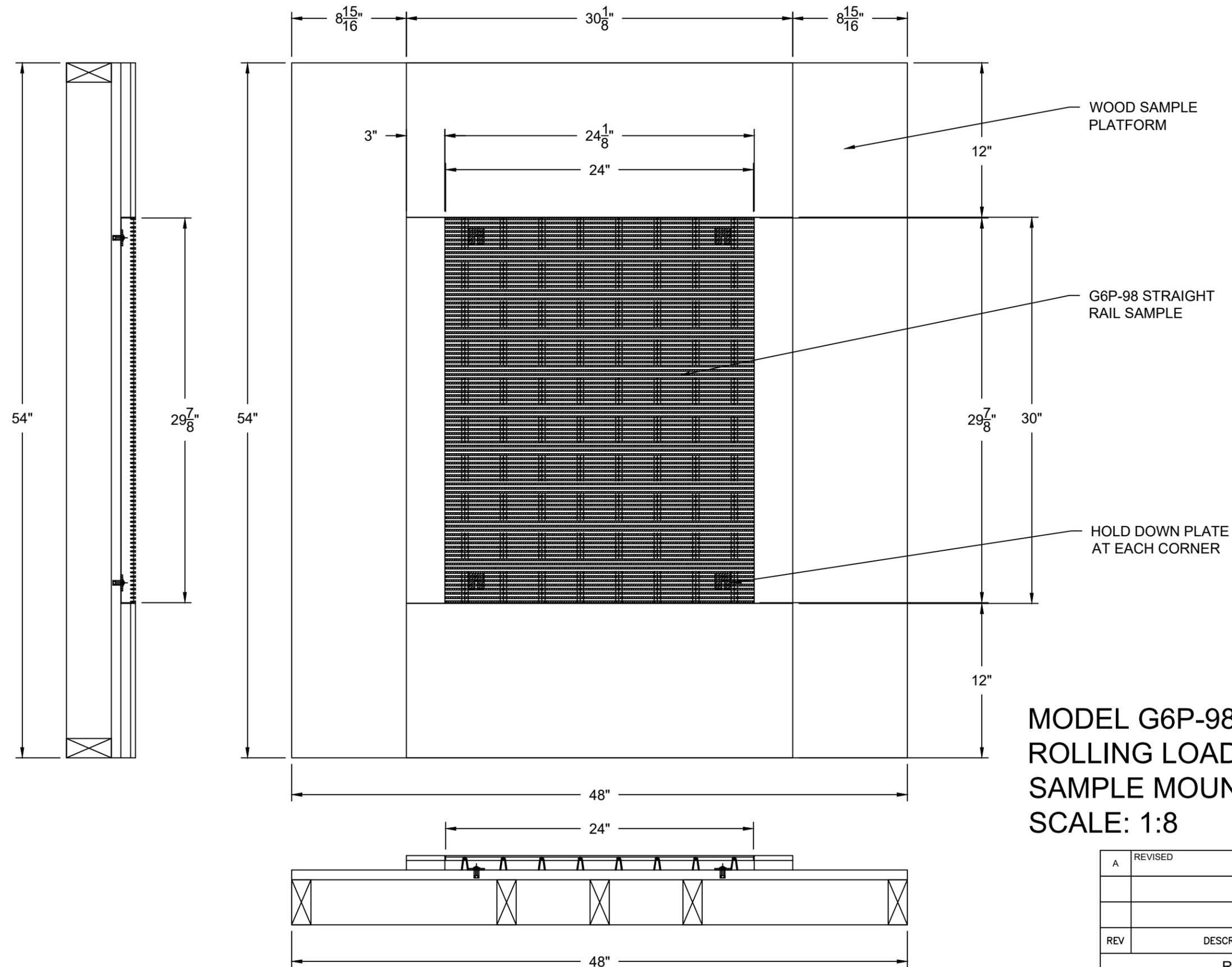
R:_E\J\CS Projects\CS Cycle Testing (CSCT)\2025\CSCT-25-003 (EFS Rolling Load Testing)\Test Dwg's - Forms - Photos\Test 25-003-01 (G6P-98 Gridline 2)\9-30-25 Test 25-003-01 Prop Dwg.dwg, 3/27/2007 10:46 AM.
 Roger Barr

This document is the property of CONSTRUCTION SPECIALTIES, INC. and contains CONFIDENTIAL PROPRIETARY INFORMATION that is not to be disclosed to third parties, and is not to be used without approval in writing from CONSTRUCTION SPECIALTIES, INC.

CS Construction Specialties
 6666 Route 405 Highway
 Muncy, PA 17766
 (607) 233-6663
 Fax: 570-546-8022
 www.c-sgroup.com

DESCRIPTION:
 ROLLING LOAD TESTING LAYOUT
 MODEL: G6P-98 STRAIGHT RAIL
 PASSINGER LIGHT TRUCK TIRE
 PROJECT NO.: CSCT-25-003

A	REVISED		RB	9/30/25	APPD BY:
					DWG BY: RB
					DATE: 9/30/25
REV	DESCRIPTION	SHT	BY	DATE	DRAWING NO.:
REVISION HISTORY					25-003-01
PART NUMBER:					SHT. 3 OF 5



**MODEL G6P-98 STRAIGHT RAIL
ROLLING LOAD TESTING
SAMPLE MOUNTING PLAN
SCALE: 1:8**

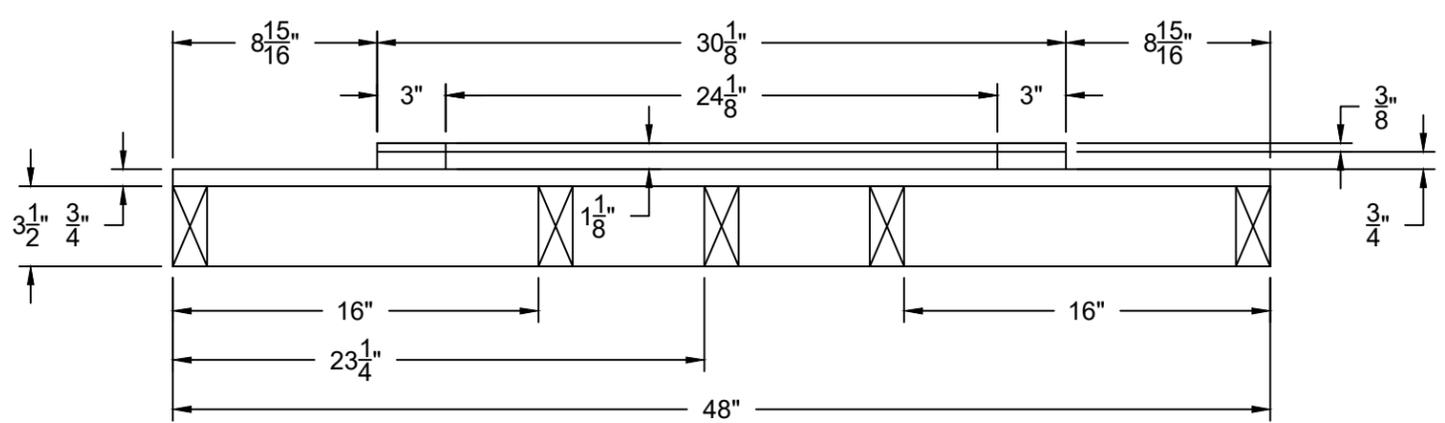
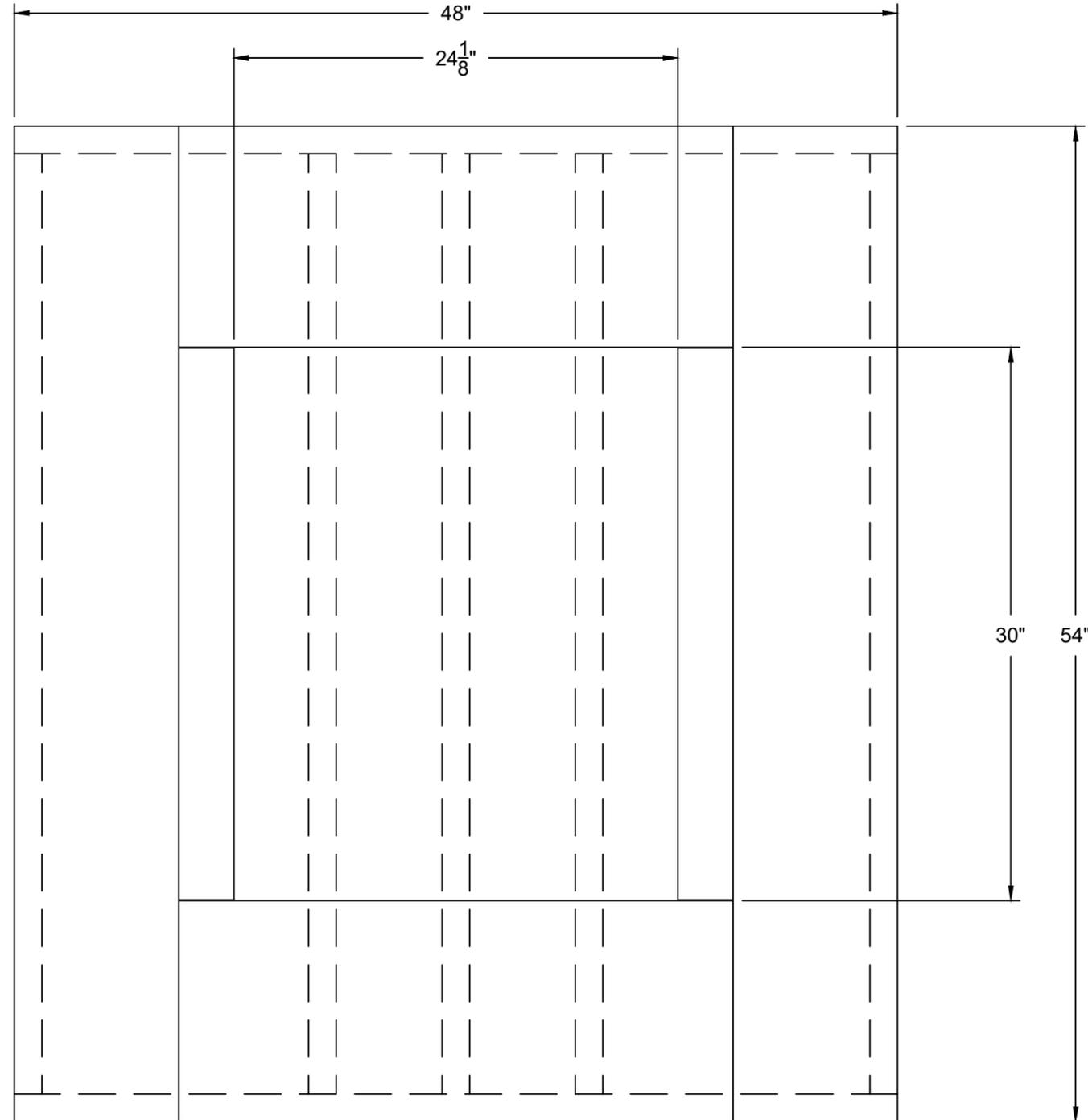
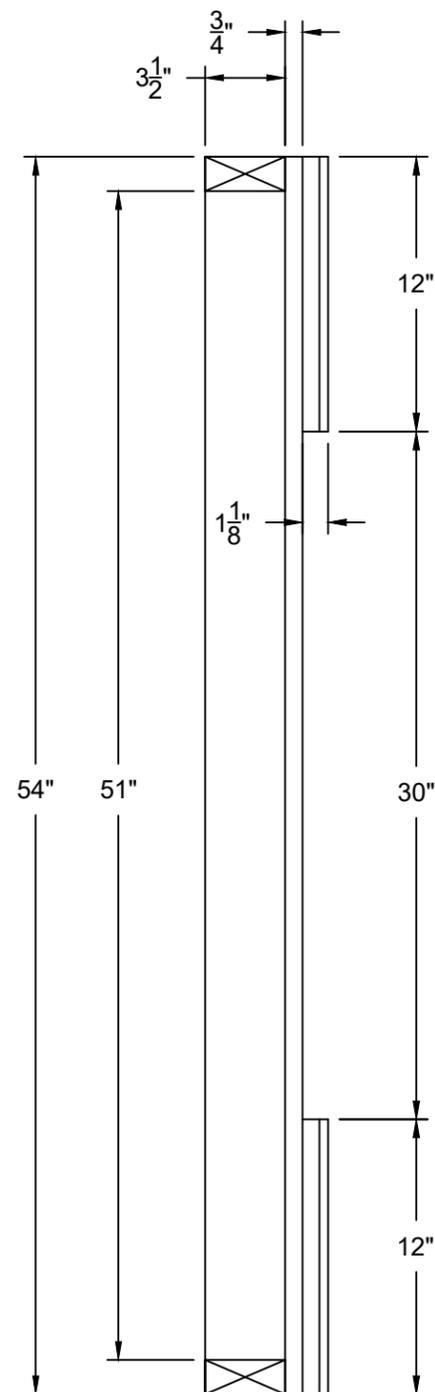
REV	DESCRIPTION	SHT	BY	DATE	DRAWING NO.:
A	REVISED		RB	9/30/25	25-003-01
REVISION HISTORY					
PART NUMBER:					SHT. 4 OF 5

R:_E\J\Projects\CS Cycle Testing (CSCT)\2025\CSCT-25-003 (EFS Rolling Load Testing)\Test Dwg - Forms - Photos\Test 25-003-01 (G6P-98 Gridline 2)\9-30-25 Test 25-003-01 Prop Dwg.dwg, 3/27/2007 10:46 AM, Roger Barr

DESCRIPTION:
ROLLING LOAD TESTING LAYOUT
MODEL: G6P-98 STRAIGHT RAIL
PASSINGER LIGHT TRUCK TIRE
PROJECT NO.: CSCT-25-003

CS Construction Specialties
6666 Route 405 Highway
Muncy, PA 17766
(607) 235-6463
Fax: 570-546-6022
www.c-sgroup.com

This document is the property of CONSTRUCTION SPECIALTIES, INC. and contains CONFIDENTIAL PROPRIETARY INFORMATION that is not to be disclosed to third parties, and is, not to be used without approval in writing from CONSTRUCTION SPECIALTIES, INC.



MODEL G6P-98 STRAIGHT RAIL
ROLLING LOAD TESTING
WOOD PLATFORM LAYOUT
SCALE: 1:8

R:\L\J\Projects\Cycle Testing (CSCT)\2025\CSCT-25-003 (EFS Rolling Load Testing)\Test Dwg - Forms - Photos\Test 25-003-01 Prop Dwg.dwg, 3/27/2007 10:46 AM.

This document is the property of CONSTRUCTION SPECIALTIES, INC. and contains CONFIDENTIAL PROPRIETARY INFORMATION that is not to be disclosed to third parties, and is not to be used without approval in writing from CONSTRUCTION SPECIALTIES, INC.

CS Construction Specialties
 666 Route 405 Highway
 Muncy, PA 17756
 (610) 233-8463
 Fax: 570-546-6022
 www.c-sgroup.com

DESCRIPTION:
 ROLLING LOAD TESTING LAYOUT
 MODEL: G6P-98 STRAIGHT RAIL
 PASSANGER LIGHT TRUCK TIRE
 PROJECT NO.: CSCT-25-003

A	REVISED		RB	9/30/25	APPD BY:
					DWG BY: RB
					DATE: 9/30/25
REV	DESCRIPTION	SHT	BY	DATE	DRAWING NO.:
REVISION HISTORY					25-003-01
PART NUMBER:					SHT. 5 OF 5