



# GEOWEB® RAILROAD LOAD SUPPORT REQUEST FOR PROJECT EVALUATION

*For preliminary evaluation, complete this form and email or fax to your Presto Geosystems distributor/representative or Presto Geosystems. Items marked with a \* are required to proceed with a preliminary evaluation.*

## Project Information

\*Project Name \_\_\_\_\_

\*City \_\_\_\_\_ \*State/Province \_\_\_\_\_

\*Country \_\_\_\_\_ Estimated Geoweb® Area \_\_\_\_\_ ft<sup>2</sup>

\*Describe problem to be solved by the Geoweb system: \_\_\_\_\_

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

## Person Requesting Information

\*Relationship with Project (check one)

Consulting Engineer     Contractor     Owner    Other \_\_\_\_\_

\*Company \_\_\_\_\_

\*Contact Name \_\_\_\_\_

\*Address \_\_\_\_\_

\*City \_\_\_\_\_ \*State/Province \_\_\_\_\_ \*Country \_\_\_\_\_ \*Zip/PC \_\_\_\_\_

\*Phone \_\_\_\_\_ \*Fax \_\_\_\_\_ Email \_\_\_\_\_

## Presto Geosystems Distributor Information

Company **PSM Technologies (Pty) Ltd**    Contact **joriokot@psmtechnologies.com**    Office Location  
**Johannesburg, South Africa**

### PRESTO GEOSYSTEMS

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## Design Information

### What are the traffic/loading details?

\*Rail Car Weight \_\_\_\_\_ tons                      \*Passes/Day \_\_\_\_\_  
 \*No. Axle \_\_\_\_\_                                      \*Design Life \_\_\_\_\_ (Years)  
 Wheel Diameter \_\_\_\_\_ inches                      Maximum Train Speed \_\_\_\_\_ (mph)

### What is the subgrade soil description?

\*Description (eg. Medium Dense Silty Sand, Very Soft Clay, etc.) \_\_\_\_\_

### \*What is the subgrade soil strength? *Enter at least one value.*

California Bearing Ratio (CBR) Value \_\_\_\_\_ %  
 R Value \_\_\_\_\_  
 Standard Penetration Resistance \_\_\_\_\_ blows / ft  
 Unconfined Compressive Strength \_\_\_\_\_ lb/ft<sup>2</sup>  
 Modulus of Elasticity, M<sub>R</sub> \_\_\_\_\_ lb/ft<sup>2</sup>  
 Other \_\_\_\_\_

### Other data (if available)

Gradation (provide curve) \_\_\_\_\_  
 Moisture Content \_\_\_\_\_ %  
 Depth to Water Table \_\_\_\_\_ ft

### Rail Details – (lbs/yd)

115 RE  
 136 RE  
 141 RE  
 Other \_\_\_\_\_

### BALLAST

Primary Ballast depth (in) \_\_\_\_\_  
 Sub-ballast depth (in) \_\_\_\_\_

### Geotextile (type)

\_\_\_\_\_

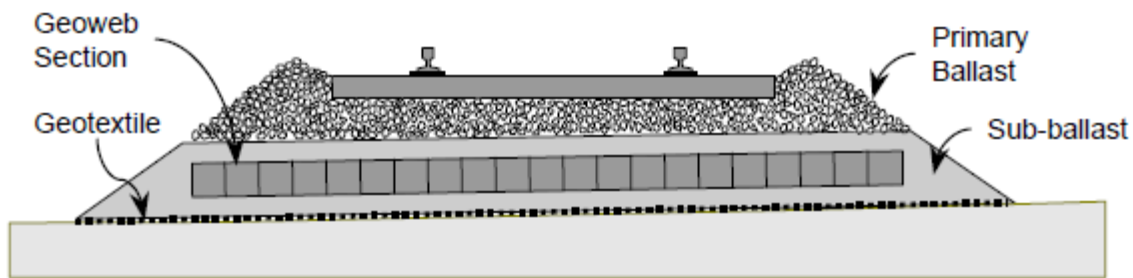
### TIE DETAILS

Type (Wood, Concrete, Steel, Plastic) \_\_\_\_\_  
 Width of tie (in) \_\_\_\_\_  
 Length of tie (in) \_\_\_\_\_  
 Tie spacing (in) \_\_\_\_\_

**Schedule**

1) **Deadline Dates:** Project Evaluation Needed By: \_\_\_\_\_  
Projected Bid Date \_\_\_\_\_ Planned Construction Startup \_\_\_\_\_


**Basic Load Support System Definitions**




*The project evaluation will be performed based on specification characteristics, structural values and limits for the Geoweb® material manufactured under an ISO 9001:2008 Quality Management program. The Evaluation is protected by copyright and any use of this Evaluation with materials manufactured by anyone other than Presto Products Company causes the recommendation and/or drawings to become invalid.*

## REFERENCE

### Correlation of Subgrade Soil Strength Parameters for Cohesive Soils (Fine-Grained)-**Imperial**

		<b>GENUINE GEOWEB® CELLULAR CONFINEMENT</b>		
<b>Correlation of Subgrade Soil Strength Parameters for Cohesive Soils (Fine-Grained)</b>				
California Bearing Ratio	Undrained Shear Strength*	Hand Penetrometer Readings	Standard Penetration Resistance	Field Identification / Visual
<b>CBR (%)</b>	<b><math>C_u</math> (psi)</b>	<b><math>P_q</math> (tsf)</b>	<b>SPT (blows/ft)</b>	
< 0.4	< 1.7	< 0.25	< 2	<b>Very Soft</b> (extruded between fingers when squeezed), Man standing sinks >3 inches
0.4 – 0.8	1.7 – 3.5	0.25 – 0.50	2 – 4	<b>Soft</b> (molded by light finger pressure) Man walking sinks 2-3 inches
0.8 – 1.6	3.5 – 6.9	0.50 – 1.0	4 – 8	<b>Medium</b> (molded by strong finger pressure) Man walking sinks 1 inch
1.6 – 3.2	6.9 – 13.9	1.0 – 2.0	8 – 15	<b>Stiff</b> (readily indented by thumb but not penetrated with great effort) Pick-up ruts ½-1 inch
3.2 – 6.4	13.9 – 27.7	2.0 – 4.0	15 – 30	<b>Very Stiff</b> (readily indented by thumb) Loaded dump truck ruts 1-3 inches
> 6.4	> 27.7	> 4.0	> 30	<b>Hard</b> (indented with difficulty by thumbnail) Loaded dump truck no ruts

### Correlation of Subgrade Soil Strength Parameters for Cohesive Soils (Fine-Grained)-**Metric**

		<b>GENUINE GEOWEB® CELLULAR CONFINEMENT</b>		
<b>Correlation of Subgrade Soil Strength Parameters for Cohesive Soils (Fine-Grained)</b>				
California Bearing Ratio	Undrained Shear Strength*	Hand Penetrometer Readings	Standard Penetration Resistance	Field Identification / Visual
<b>CBR (%)</b>	<b><math>C_u</math> (kPa)</b>	<b><math>P_q</math> (kg/cm<sup>2</sup>)</b>	<b>SPT (blows/300 mm)</b>	
< 0.4	< 11.7	< 0.25	< 2	<b>Very Soft</b> (extruded between fingers when squeezed), Man standing sinks >75 mm
0.4 – 0.8	11.7 – 24.2	0.25 – 0.50	2 – 4	<b>Soft</b> (molded by light finger pressure) Man walking sinks 50 -75 mm
0.8 – 1.6	24.2 – 47.6	0.50 – 1.0	4 – 8	<b>Medium</b> (molded by strong finger pressure) Man walking sinks 25 mm
1.6 – 3.2	47.6 – 95.9	1.0 – 2.0	8 – 15	<b>Stiff</b> (readily indented by thumb but not penetrated with great effort) Pick-up ruts 13 – 25 mm
3.2 – 6.4	95.9 – 191	2.0 – 4.0	15 – 30	<b>Very Stiff</b> (readily indented by thumb) Loaded dump truck ruts 25 – 75 mm
> 6.4	> 191	> 4.0	> 30	<b>Hard</b> (indented with difficulty by thumbnail) Loaded dump truck no ruts

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