



COLD IN PLACE RECYCLING INTELLIGENT COMPACTION TEST STRIP SAMPLE REPORT



*Office of Construction Engineering
Caltrans
November 2015*

Test strip report must include:

1. Completed *CIR Construction Test Strip Submittals Checklist* form
2. Nuclear gage density per location and GPS measured coordinates per location
3. Field compaction curve density versus number of passes
4. All passes compaction curves from Veta
5. All passes correlation analysis plot from Veta
6. Final coverage correlation of density vs. pass count over test strip
7. Plot of distribution of pass count over test strip area
8. Plot of distribution of ICMV over test strip

INTELLIGENT COMPACTION COLD-IN-PLACE RECYCLING TEST STRIP SUBMITTAL CHECKLIST
CEM-IC20 (NEW 11/02/2015)

PROJECT INFORMATION/NAME	CONTRACT NUMBER	CO/RTE/PM
	PROJECT IDENTIFIER NUMBER	
	CONTRACTOR NAME	

Instruction: This checklist form is to be completed and submitted by the contractor with the test strip report to ensure a complete submittal. Use this checklist form to review the completeness of submittals of intelligent compact test strip information. For questions about this form send an email to: IC@dot.ca.gov

COLD-IN-PLACE RECYCLING (CIR) TEST STRIP PLACEMENT INFORMATION

Test Strip Placement Location		Test Strip Placement Date
Beginning Station	Ending Station	CIR Thickness
IC Technical Representative(ICTR)		ICTR Phone Number
IC Quality Control Technician (ICQCT)		ICQCT Phone Number

Test Strip Report Required Submittals**Test Strip Report General Information**

Contractor Submittal <i>Check all that were submitted</i>	Submittal Review <i>This Column For Engineer's Use</i>
<input type="checkbox"/> Nuclear gage density per location	The submitted is adequate? <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> See Comment
<input type="checkbox"/> GPS measured coordinates per density location	The submitted is adequate? <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> See Comment
<input type="checkbox"/> Field compaction curve versus number of passes	The submitted is adequate? <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> See Comment

Veta Analysis Results

Contractor Submittal <i>Check all that were submitted</i>	Submittal Review <i>This Column For Engineer's Use</i>
<input type="checkbox"/> All passes compaction curves from Veta	The submitted is adequate? <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> See Comment
<input type="checkbox"/> All passes correlation analysis report from Veta	The submitted is adequate? <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> See Comment

Color Layout Plots

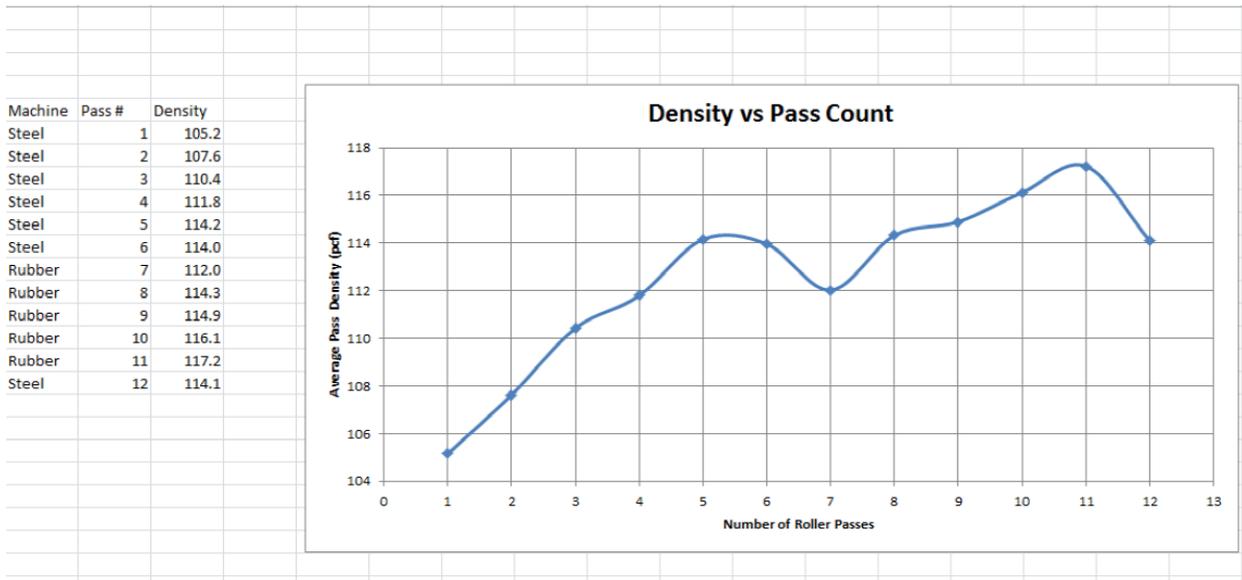
Contractor Submittal <i>Check all that were submitted</i>	Submittal Review <i>This Column For Engineer's Use</i>
<input type="checkbox"/> Color layout plot of distribution of pass count over test strip	The submitted is adequate? <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> See Comment
<input type="checkbox"/> Color layout plot of distribution of intelligent compaction measurement value over test strip	The submitted is adequate? <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> See Comment

COMMENTS:

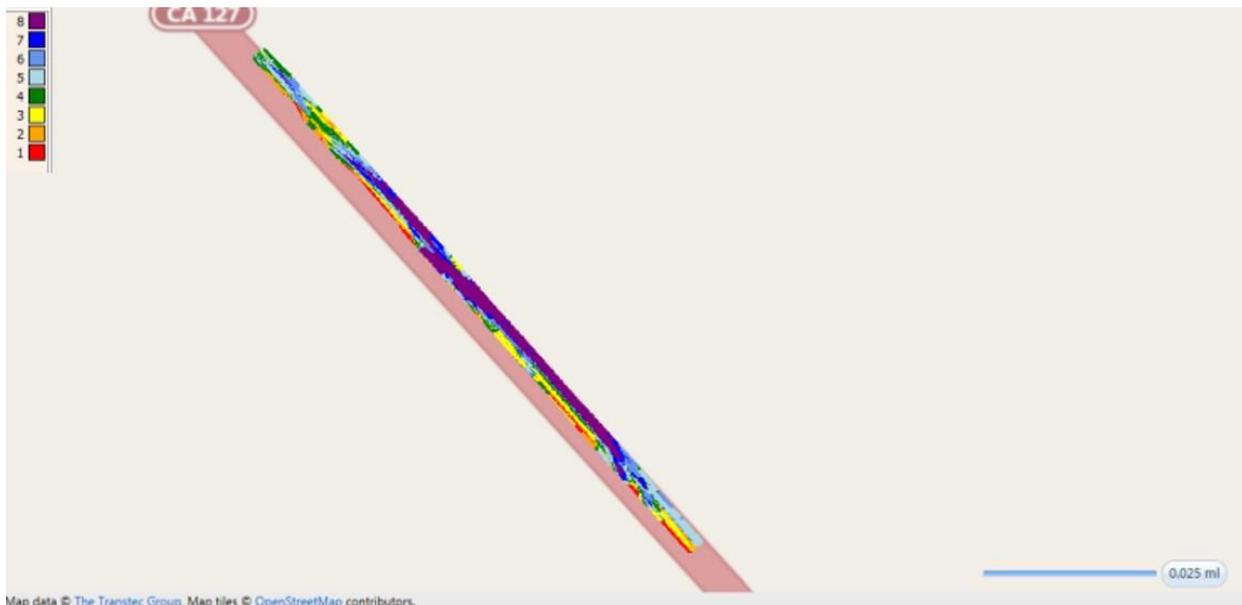
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Density Tests								Profile Points					
Material	ID	Date	Easting (ft)	Northing (ft)	Test Type	Value	Pass	Avg.	ID	Date	Easting (ft)	Northing (ft)	Description
Vibe	1	9/22/2015	7057559.081	2475666.782	Density - Nuclear Gauge	106.1	1		1	9/22/2015	7057629.5	2475563	CL
	2	9/22/2015	7057550.741	2475665.927	Density - Nuclear Gauge	103.9	1	105.2	2	9/22/2015	7057603.5	2475591.25	CL
	3	9/22/2015	7057537.783	2475679.664	Density - Nuclear Gauge	105.5	1		3	9/22/2015	7057577	2475619.25	CL
Steel	4	9/22/2015	7057551	2475646.75	Density - Nuclear Gauge				4	9/22/2015	7057551	2475646.75	CL
	5	9/22/2015	7057519.931	2475699.226	Density - Nuclear Gauge	108.9	2		5	9/22/2015	7057524	2475677.5	CL
	6	9/22/2015	7057506.173	2475713.825	Density - Nuclear Gauge	105.4	2	107.6	6	9/22/2015	7057490.5	2475712.75	CL
Static	7	9/22/2015	7057491.452	2475729.326	Density - Nuclear Gauge	108.6	2		7	9/22/2015	7057468	2475737	CL
	8	9/22/2015	7057474.271	2475747.915	Density - Nuclear Gauge	111.2	3		8	9/22/2015	7057427	2475781.25	CL
	9	9/22/2015	7057456.261	2475767.772	Density - Nuclear Gauge	108.1	3	110.4	9	9/22/2015	7057384.5	2475826.75	CL
Vibe	10	9/22/2015	7057440.028	2475785.231	Density - Nuclear Gauge	112.0	3		10	9/22/2015	7057364	2475849.25	CL
	11	9/22/2015	7057425.178	2475801.24	Density - Nuclear Gauge	112.2	4		11	9/22/2015	7057337.5	2475877.25	CL
	12	9/22/2015	7057409.318	2475818.077	Density - Nuclear Gauge	110.1	4	111.8	12	9/22/2015	7057306.5	2475913.5	CL
Static	13	9/22/2015	7057403.709	2475814.451	Density - Nuclear Gauge	113.1	4		13	9/22/2015	7057287	2475935.5	CL
	14	9/22/2015	7057401.658	2475811.116	Density - Nuclear Gauge	114.2	5		14	9/22/2015	7057287	2475935.5	CL
	15	9/22/2015	7057413.91	2475797.88	Density - Nuclear Gauge	112.1	5	114.2	15	9/22/2015	7057295	2475942.25	EP
Steel	16	9/22/2015	7057418.658	2475800.954	Density - Nuclear Gauge	116.2	5		16	9/22/2015	7057315	2475923.25	EP
	17	9/22/2015	7057401.658	2475811.116	Density - Nuclear Gauge	114.2	5		17	9/22/2015	7057347	2475887.75	EP
	18	9/22/2015	7057413.91	2475797.88	Density - Nuclear Gauge	112.1	5	114.2	18	9/22/2015	7057372	2475860.25	EP
Static	19	9/22/2015	7057418.658	2475800.954	Density - Nuclear Gauge	116.2	5		19	9/22/2015	7057394.5	2475836.25	EP
	20	9/22/2015	7057435.314	2475782.544	Density - Nuclear Gauge	114.0	6		20	9/22/2015	7057438	2475790.25	EP
	21	9/22/2015	7057430.945	2475778.824	Density - Nuclear Gauge	112.0	6	114.0	21	9/22/2015	7057478	2475746	EP
Pneumatic	22	9/22/2015	7057447.657	2475761.739	Density - Nuclear Gauge	115.9	6		22	9/22/2015	7057501	2475721.75	EP
	23	9/22/2015	7057452.035	2475765.434	Density - Nuclear Gauge	115.2	1		23	9/22/2015	7057501	2475721.75	EP
	24	9/22/2015	7057471.127	2475743.314	Density - Nuclear Gauge	110.4	1	112.0	24	9/22/2015	7057534	2475686	EP
Pneumatic	25	9/22/2015	7057466.847	2475739.28	Density - Nuclear Gauge	110.5	1		25	9/22/2015	7057562.5	2475656	EP
	26	9/22/2015	7057485.305	2475720.946	Density - Nuclear Gauge	114.0	2		26	9/22/2015	7057588.5	2475627.75	EP
	27	9/22/2015	7057489.617	2475724.036	Density - Nuclear Gauge	112.7	2	114.3	27	9/22/2015	7057611.5	2475601.75	EP
Pneumatic	28	9/22/2015	7057509.27	2475702.428	Density - Nuclear Gauge	116.3	2		28	9/22/2015	7057639.5	2475571.25	EP
	29	9/22/2015	7057505.07	2475697.847	Density - Nuclear Gauge	116.9	3		29	9/22/2015			
	30	9/22/2015	7057535.002	2475667.065	Density - Nuclear Gauge	112.3	3	114.9	30	9/22/2015			
Pneumatic	31	9/22/2015	7057539.521	2475670.331	Density - Nuclear Gauge	115.5	3		31	9/22/2015			
	32	9/22/2015	7057561.178	2475646.714	Density - Nuclear Gauge	118.5	4		32	9/22/2015			
	33	9/22/2015	7057557.158	2475641.513	Density - Nuclear Gauge	112.2	4	116.1	33	9/22/2015			
Pneumatic	34	9/22/2015	7057576.65	2475622.036	Density - Nuclear Gauge	117.7	4		34	9/22/2015			
	35	9/22/2015	7057581.142	2475625.339	Density - Nuclear Gauge	117.5	5		35	9/22/2015			
	36	9/22/2015	7057611.351	2475591.361	Density - Nuclear Gauge	117.0	5	117.2	36	9/22/2015			
Steel	37	9/22/2015	7057606.864	2475587.245	Density - Nuclear Gauge	117.2	5		37	9/22/2015			
	38	9/22/2015	7057608.014	2475591.412	Density - Nuclear Gauge	114.9	7		38	9/22/2015			
	39	9/22/2015	7057604.088	2475602.313	Density - Nuclear Gauge	113.4	7		39	9/22/2015			
Coverage (Final)	40	9/22/2015	7057551.034	2475652.084	Density - Nuclear Gauge	114.1	7		40	9/22/2015			
	41	9/22/2015	7057511.69	2475705.703	Density - Nuclear Gauge	114.5	7		41	9/22/2015			
	42	9/22/2015	7057482.8	2475724.514	Density - Nuclear Gauge	113.9	7		42	9/22/2015			
	43	9/22/2015	7057463.632	2475748.811	Density - Nuclear Gauge	113.8	7		43	9/22/2015			
	44	9/22/2015	7057423.216	2475798.915	Density - Nuclear Gauge	115.0	7		44	9/22/2015			
	45	9/22/2015	7057380.781	2475834.922	Density - Nuclear Gauge	113.3	7		45	9/22/2015			
	46	9/22/2015	7057368.739	2475855.595	Density - Nuclear Gauge	114.5	7		46	9/22/2015			
47	9/22/2015	7057333.379	2475887.94	Density - Nuclear Gauge	114.1	7		47	9/22/2015				

Density Gauge Readings with GPS Coordinates



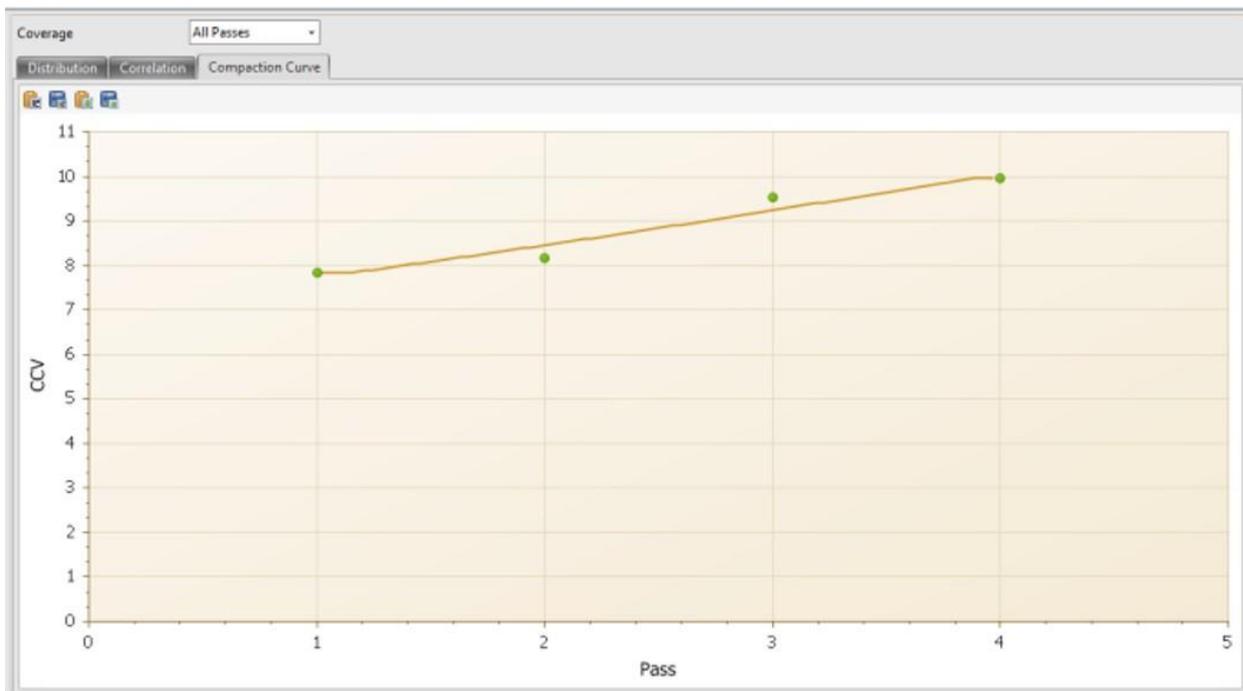
Test Strip field compaction curve density vs. number of passes



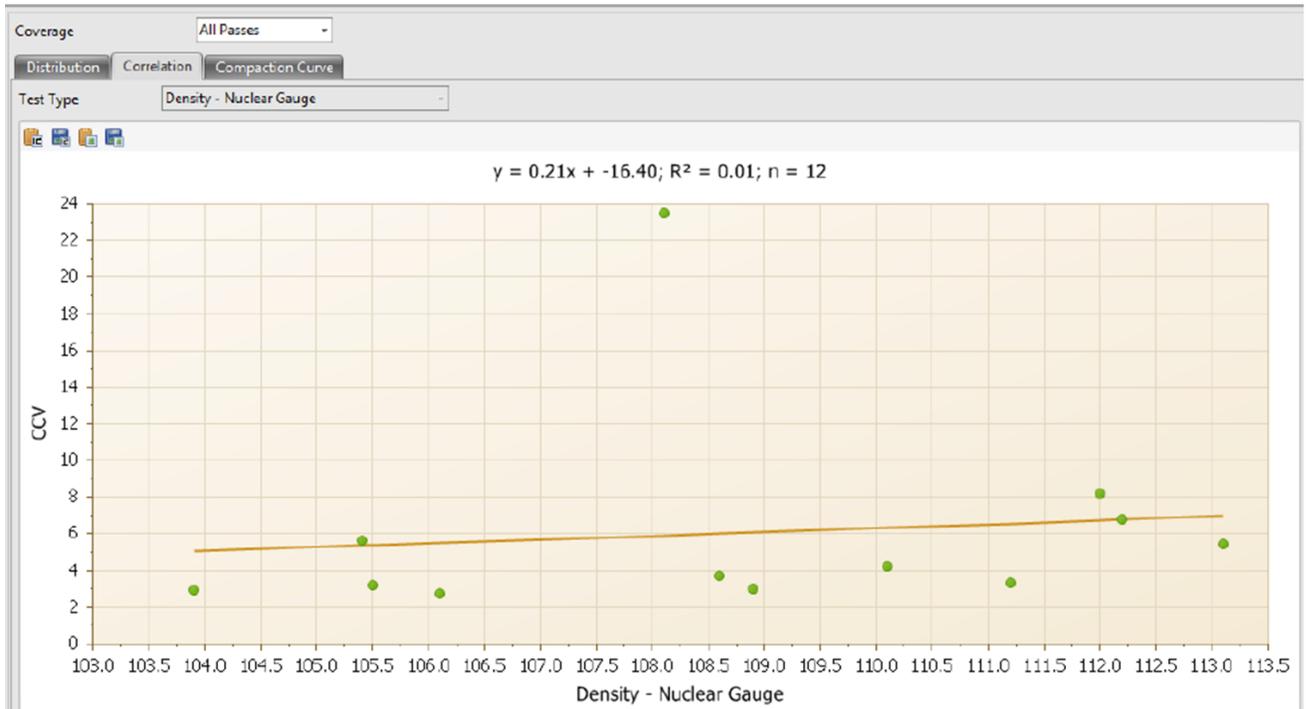
Distribution of Pass Count over Test Strip Area



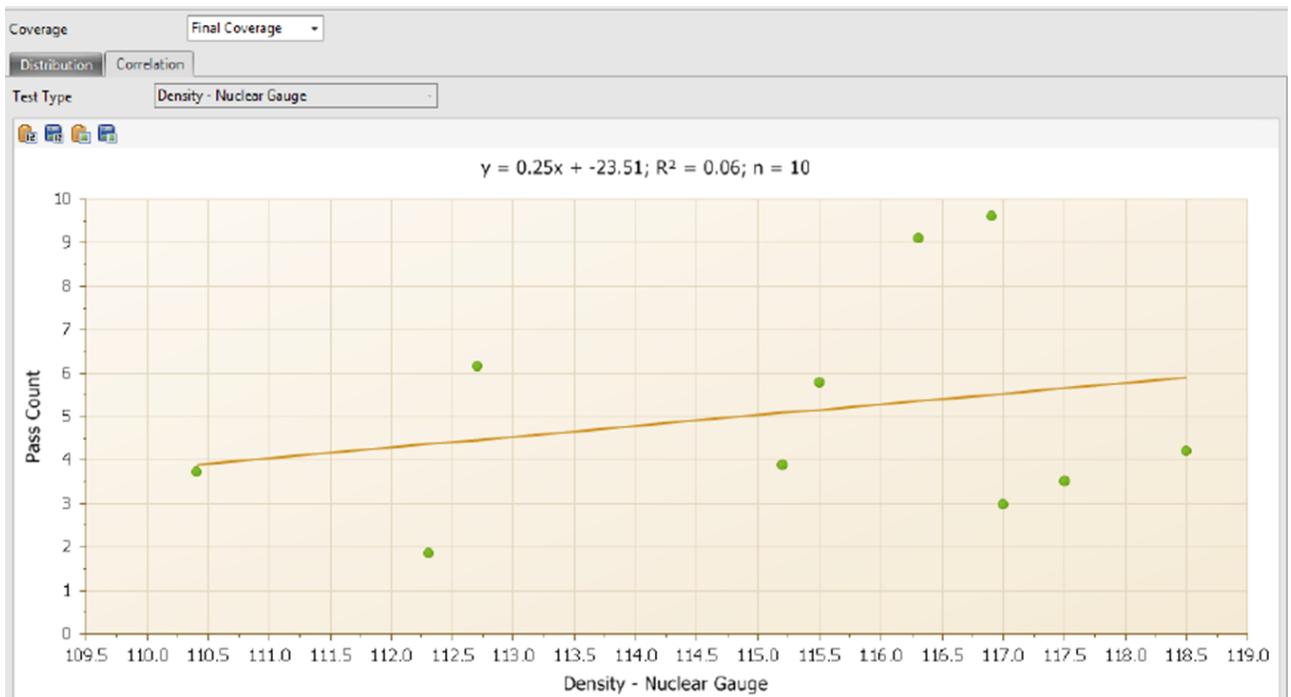
Distribution of CCV Values over Test Strip Area



All Passes Compaction Curve



All Passes Correlation – Density vs CCV



Final Coverage – Density vs Pass Count