
Standard Practice for Data Lot Names for Use with Intelligent Construction Technologies

AASHTO Designation: PP 114-22 (2024)¹

First Published: 2022

Reviewed but Not Updated: 2024

Tech Subcommittee: 5c, Quality Assurance and Environmental



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1. SCOPE

- 1.1. This work shall consist of standardization of data lot naming conventions used with intelligent construction technologies.
- 1.2. This standard practice is intended to be applied with R 110 and R 111.
Note 1—In the future, this standard will be used with the dielectric profile method.
- 1.3. This standard practice is intended to be applied for use with creation of projects within Veta.
- 1.4. All tasks are the contractor's responsibility, unless designated otherwise within this provision.

2. REFERENCED DOCUMENTS

- 2.1. *AASHTO Standards:*
 - R 110, Continuous Thermal Profile of Asphalt Mixture Construction
 - R 111, Intelligent Compaction for Embankment and Asphalt Paving Applications
- 2.2. *Other:*
 - The Transtec Group. Intelligent Construction. <https://www.intelligentconstruction.com>

3. TERMINOLOGY

- 3.1. *Definitions:*
 - 3.1.1. *intelligent construction technology (ICT)*—equipment that georeferences measurements using a global navigation satellite system (GNSS). This includes equipment such as intelligent compaction, paver mounted thermal profiling, etc.
 - 3.1.2. *traffic lane*—the portion of a traveled way for the movement of a single line of vehicles.
 - 3.1.2.1. *auxiliary lane*—a portion of the roadway adjoining the traveled way for parking, speed-change, or other purposes supplementary to through-traffic movement.
 - 3.1.2.2. *centerline offsets*—the location of the left and right edge of the production/compaction area with respect to the centerline, facing in the direction of increasing stationing. Stationing typically increases from west to east and south to north.

- 3.1.2.3. *direction of travel*—the direction that traffic moves during non-construction conditions (e.g., northbound, southbound, eastbound, westbound).
- 3.1.2.4. *roadway*—general term denoting a public way for purposes of vehicular travel, including the entire area within the right of way.
- 3.1.2.5. *traveled way*—the portion of the roadway for the movement of vehicles, exclusive of shoulders and auxiliary lanes.
- 3.1.3. *Veta*—standardized intelligent construction data management (ICDM) software that stores, maps, and analyzes geospatial data resulting from intelligent construction technology (ICT) such as intelligent compaction, thermal profiling, and spot test data (e.g., density, moisture). This software can perform standardized data processing, analysis, and reporting to provide project summary results from various ICT manufacturers. In particular, the software can provide statistics, histograms, correlations for these measurements, document coverage area and evaluate the uniformity of the ICT measurements as part of the project quality control operations. (Software can be downloaded from www.intelligentconstruction.com.)

4. CONSTRUCTION REQUIREMENTS

- 4.1. *Data Lot Establishment for ICT Measurement Data:*
- 4.1.1. Establish data lots for ICT measurement data per Table 1.

Table 1—Data Lot Establishment Criterion

Specification	Description	Day	Material Type	Lift	Centerline Offsets	Direction of Travel
Asphalt Paving ^a	Undivided Highway	X	X	X	X	(Blank)
Asphalt Paving ^a	Divided Highway	X	X	X	X	X
Reclamation ^b , Base, Subbase	Undivided Highway	(Blank)	X	X	X	(Blank)
Reclamation ^b , Base, Subbase	Divided Highway	(Blank)	X	X	X	X

^a Asphalt paving applications such as plant-mixed asphalt (hot mix and warm mix), stone matrix asphalt.

^b Reclamation applications such as full depth reclamation, stabilized full depth reclamation, cold in place recycling, cold central plant recycling.

- 4.1.2. Name data lots using standardized format per Tables 2 and 3. Store data lot designations digitally with associated ICT measurement data.
- 4.1.3. See Appendix X1 for examples of data lot establishment.

Table 2—Standardized Naming Convention for Data Lots

Standardized Format ^a	Definition
ROUTE-MATL-L-LEFT-RIGHT ^b	Undivided Highways
ROUTE-MATL-L-LEFT-RIGHT-DT ^c	Divided Highways

^a Add an additional designation behind ROUTE for instances where more than one site calibration is needed within project limits. For example, a site calibration was completed for the northern and southern limits of the project—an “N” and an “S” would be added immediately behind ROUTE [TH68N-HMA-L1-12L-CL, TH68S-HMA-L1-12L-CL]).

^b Example of standardized format for undivided highways: TH68-HMA-L1-12L-CL

^c Example of standardized format for divided highways: TH68-HMA-L1-12L-CL-NB

Note 2—The coordinates contain the date component of the data lot designation and therefore are not included in the standardized naming convention.