# Exchange Requirement

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| Name | Shop drawing request |

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| --- | --- |
| Identifier | ER.S.102 |

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| --- | --- | --- |
| Change Log | | |
| 2016-07-30 | draft | ttle@iastate.edu |

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| --- | --- | --- | --- |
| Project Stage | 0 | Programming and planning |  |
| 1 | Design | **✓** |
| 2 | Letting |  |
| 3 | Construction |  |
| 4 | Operation and maintenance |  |
| 5 | Disposal |  |

**General Description**

Sign requirements and specifications are sent to the Iowa DOT Sign Shop in order for it to proceed with the development of the shop drawings. Shop drawings developed by the Iowa DOT Sign Shop must be in accordance with the requirements and specifications prepared by the Office of Traffic and Safety. Shop drawings must be submitted to the Office of Traffic and Safety for review and approval before proceeding with fabrication.

**Exchange disciplines**

* ***Sender:*** Office of T&S – Traffic engineers
* ***Receiver:*** Iowa sign shop

**Information requirements**

Information required for shop drawing includes:

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| --- | --- | --- | --- |
| **Data attribute group** | **Data attribute** | **Description** | **Comments** |
| Project | Project title | Name of a project |  |
| Project ID | Identity of a sign |  |
| Project location | Location of a project | What data attributes represent the location of a project (e.g., district, garage, route id)? |
| Expected start date | Expected date when the project will start |  |
| Expected finish date | Expected date when the project will start |  |
| Sign identifier | DOT stock number | Stock number assigned a sign |  |
| Iowa MUTCD | Iowa Manual on Uniform Traffic Control Devices |  |
| Federal MUTCD | Federal Manual on Uniform Traffic Control Devices |  |
| Sign location | District | Iowa district number |  |
| County | County number |  |
| Garage | Iowa garage maintenance number |  |
| Route ID | For instance, I-29 |  |
| Milepost | Milepost of sign |  |
| GPS Latitude | GPS coordinate |  |
| GPS Longitude | GPS coordinate |  |
| Sign face direction | Direction of sign face (E, N, NE, etc.) |  |
| Travel direction | Direction of travel along a specific route |  |
| Side of road | Side of road where post is located, relative to direction of travel |  |
| Sign color | Sign color | Color of sign |  |
| Sign size | Sign width | Width of sign |  |
| Sign height | Height of sign |  |
| Sign area | Area of sign |  |
| Sign message | Sign message | Message of sign |  |
| Sign type | Sign type | Type of sign (regulatory, warning, guide, school, rest area, construction) |  |
| Subcategory | Subcategory within sign type |  |
| Replacement notes | Deficiency | Noted deficiency for replacement (whether damage, design change, etc.) |  |
| Sign material | Sheeting | Sign sheeting material (diamond grade, engineering grade, high intensity, prismatic high intensity) |  |
| Blank material | Blank material of the sign (extruded aluminum, metal, wood) |  |
| Post type | Post type | Type of post (e.g., wood, U-Chan,) |  |
| Post type subtype | Subtype values used to drive data collection efforts utilizing the collector application |  |
| Post dimensions | Post size | Size of post (e.g., 4”x6’) |  |
| Post length | Length of post |  |
| Post quantity | Number of posts | Number of posts installed at an assembly location |  |
| Number of signs | Number of sign installed at a location |  |
| Footing | Width | Width of footing |  |
| Height | Height of footing |  |
| Depth | Depth of footing |  |
| Material | Material of footing |  |
| Other design specifications |  | In accordance with Iowa sign design manuals |  |
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