Overview

Process map

Task

What, who, which software, data format, discussion on what wrong

Exchange requirements

Monthly production schedule meeting

* This meeting involves all offices, this is 6 hour meeting, one hour for each district. The meeting will identify the need for new or re construction project.

Sign design

* Designer use google earth or road view or road view to identify the location of the existing inventory and the site to make decision.
* At the end of the design phase, design will produce microstation files and pdf files. Microstation are stored in Projectwise and pdf files are transferred to the office of contracts who store pdf plans after the the contract has been developed in ERMS.
* Designers uses microstation to design sign in 3D.
* The design information in microstation are exported in to ms excel file as an summarized design detail and pdf plans.
* Designer also do estimate using bid items?

Shop drawing

* Shop drawing is performed by the iowa shop, or occasionaly by onctractor in some cases that iowa shop is not able to do.
* Shop drawing is a detail drawing of the desing information, based on manual and specicication, standards.
* The shop drawings are used for fabrication of signs.

Sign fabrication

* This is performed by the Iowa shop
* The fabricated signs will be provided to the selected contractors.

Cost estimating

* The design information from the pdf plans and excel summary is used together with the unit prices to develop the cost estimate for the project.
* This estimate is based on to determine installation price bidding.

Bidding

* Contractors are invited to participate in the bidding.
* The best offer will be selected.

Contract development

* Office of contracts will develop a contract with a selected contractor which specify time, price, quantity, according the design.
* Contract for installation the signs will be developed based on the bidding results.
* After the contracts is sign, all the docuements will be stored in the ERMS system.
* The project information will be stransferred to the construction and material office or RCE for them to do inspection.

Project inspection

* The construction office will keep track the project progress, quantity and quality.
* To make sure that signs are install at the right location
* Using right materials and meet the schedule deadlines.
* Current effort with some pilot projects this summer that ask construction inspector to use maintenance app to put data regarding signs, barriers, culvers.
* As-built information are presented in pdfs and stored in ERMS system. This pdf as-built data is mainly recycle from the design pdf plans.
* Other data created in this phases such as material, cost, are stored in the ERMS as well.

Sign installation

* The contractor may need to pick up signs form multiple Iowa shops.
* Materials and quantities need to be submitted to the construction office for approval.

Inventory data adding

* At the end of the construction phases, the construction office may (not sure) hand over to the maintenance staff for adding new inventory into their databases systems the oracle database.

Data

* Project id tied to the paving projects occasionally or have a separate project number

Software