



Form Ref: HSI-10

## Independent Health & Safety Inspection – Blue Star Item

Version: 2.0 Jun 2015



## Awarded for Exceptional Performance or New Initiative not widely used on other sites

Project	Principal Contractor (PC)	Date of Inspection
A160-A180 Immingham	Costain	22/07/15
Site Contact	Email Address	Telephone Number
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# Description of Blue Star Item

#### BIM

The Government Construction Strategy (May 2011) announced the requirement for collaborative 3D Building Information Modelling (BIM) on projects by 2016. To achieve this, Highways England is advancing its own BIM strategy within its project and asset management activities, including earmarking a number of projects as 'Early Adopters' to develop the required systems, software, protocols and capabilities which are not currently widely used in the highways sector. The A160/A180 Port of Immingham Improvement scheme has been selected as one such 'Early Adopter'. Below are details of where the BIM developments have contributed to the advancement of H&S on site.

#### **Interactive Stats Drawing**

To be used for clash detection, will include 3d imports when available.

#### 4D Sequencing,

The programme will be embedded into elements of the model for construction purposes. The initial target for full integration will be the Rail Bridge and Town Street Bridge. For the Rail Bridge, focused construction methodologies will be visualised and digital prototyping used to demonstrate the breakdown of the construction into small timescale intervals. This will provide confidence to Network Rail and time check deliverables for operational monitoring during the possession. Syncro will be used to tie the programme into the Model

### Benefits of Blue Star Item

#### Interactive Stats drawing

- •Interactive stats drawing has allowed real time reporting and feedback to site operations
- •Single source of truth for stats information on the project, having hyperlinks back to the common data environment
- •Trail holes clarify existing stat mains, reducing the chance of striking through mains.

#### 4D Sequencing

- •Better communication: The ability to show a digitised version of a construction sequence allows proof of buildability and time, engineers and subcontractors on sites can truly collaborate and agree on program.
- •Improve workflow with actual data: Apart from better communication, 4D sequencing also offers better workflow analysis based on correct and latest data. Through the model, you can access real time data. You can enter updated data into a model or add new resources to the program for the whole team to view and analysis.
- •Save and transfer information: With the ability to show a 4d sequence it is much easier for construction managers to show the day's expected work, and highlight what else is happening on site. This new way of transferring information allows for better memory feedback for construction staff.
- •Increase productivity: Been able to agree on methods of construction and an earlier stage allows and the fact that you can digitally build the job first, will negate much abortive work.



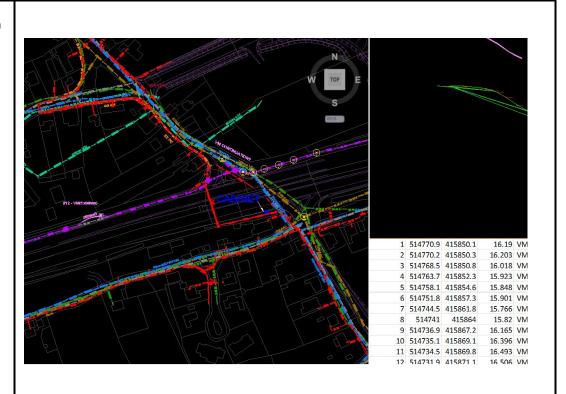


Details and Cost of any Specific Product AutoCAD 2015, Primavera P6 and Syncho Pro all required to carry out the above BIM techniques, cost will vary and dependant on how many licences would be required. Training is also a requirement and needs to be just before you use the software so techniques are not lost through lack of usage.





# Photograph



## Photograph

