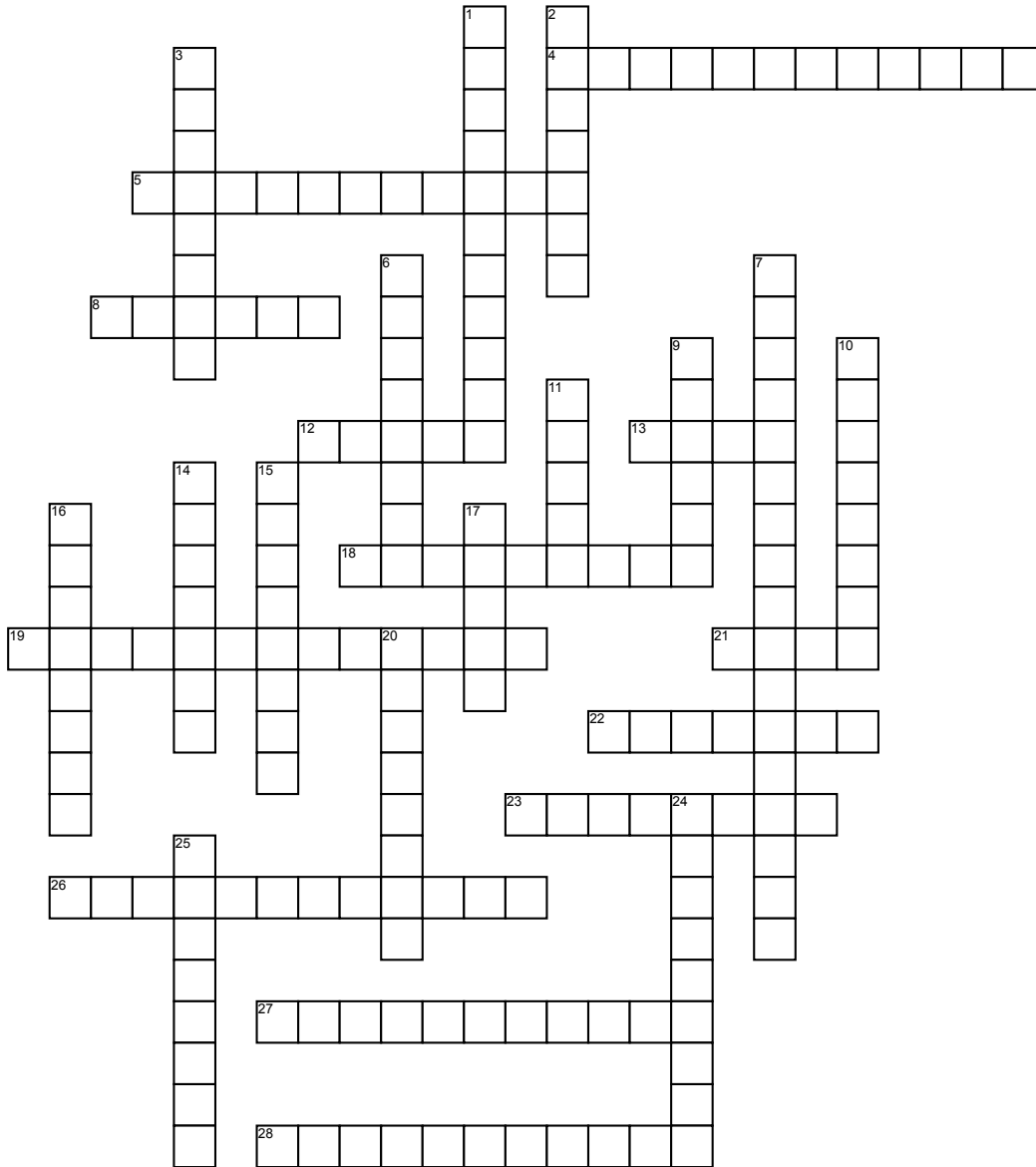


Ch 7 BIM and Closeout



Across

- 4. Inaccurate or unorganized building data accounts for a 60 % reduction in staff _____.
- 5. The use if BIM for facility operations can create _____ life-cycle savings.
- 8. A _____ BIM is the single, current, composite reference model for a structure that references information about the project.
- 12. _____ percent of a building's total cost is spent in the design and construction phase of a project.
- 13. Some of the biggest costs associated with the current system of information handover is _____ time in trying to locate information for maintenance activities.
- 18. Rising cost of _____ such as utilities, equipment and labor create challenges for building owners.
- 19. PDF was originally developed as an _____ means of facilitating electronic document exchange.
- 21. Some of the biggest costs associated with the current system of information handover is _____ time in trying to locate information for maintenance activities.
- 22. Buildings _____ 40% of the total energy use in the United States.
- 23. Unlike CAD, BIM represents a way of consistently updating _____ information without having to find and revise multiple CAD files.
- 26. A downside to the use of CAD files as record documents is the lack of _____ within the files.

- 27. The key factor in artifacts is that they lack the _____ to change over time and are not an effective means of updating information throughout the life of a facility.
- 28. Owners are realizing the value of an accurate as-built model as a project _____.
- Down**
- 1. The pressure to deliver high quality, flexible and _____ structures into the built environment will be under increasing scrutiny.
- 2. The record BIM may change over time as facility information is _____.
- 3. _____ deliverables can be defined as static project documentation.
- 6. The reality is that BIM is becoming a fabrication model for contractors and an _____ as-built product.
- 7. The technology and formatting used in many as built (record) documents is the technology and formatting used, which is _____ to the information that is needed.
- 9. Autodesk Recap can create a 3D model from a collection of _____ of a particular focus area in the facility.
- 10. _____ deliverables can be defined as static project documentation
- 11. Many owners are asking for phased _____ scans to be completed of their facilities that they can have converted into models downstream if needed.
- 14. Record drawings are often not useful to facility managers because their intended use was to construct a facility, not _____ it.

- 15. Successful closeout information delivery starts in the project _____ phase.
- 16. As a means of updating information, both graphically and linking to static artifacts, BIM is an invaluable tool as a _____ deliverable.
- 17. There is a tremendous opportunity for the entire (project) team to better collaborate and leverage BIM as a source of additional scope, responsibility and potentially, _____.
- 20. The facility BIM model needs to be developed for an _____ purpose.
- 24. BIM creates a dynamic means of capturing and updating _____ facility information for a project quickly
- 25. The construction manager may use survey tools in creating the record BIM to capture constructed conditions and _____ existing subcontractor or fabricator models to create the record BIM.