The G&E Company is preparing a bid to build the new 50,000 seat Greendale baseball stadium. The construction must start on Monday **July 2, 2012**, and be completed in time for the start of the **2015** season. A penalty clause of $10,000 per workday of delay beyond **May 31, 2015** is written into the contract.

Ben Keith, the president of the company, expressed optimism at obtaining the contract and revealed that the company could net as much as $2 million on the project. He also said if they are successful, the prospects for future projects are quite good since there is a projected renaissance in building classic ball parks with modern luxury boxes.

**Technical Details of the Greendale Baseball Stadium**

The baseball stadium is an outdoor structure with a retractable roof. The project begins with clearing the site and continues according to the list of activities listed in the attached table.

|  |  |  |  |
| --- | --- | --- | --- |
| **ID** | **Activity** | **Duration (days)** | **Predecessor Activity(s)** |
| 1 | Baseball Stadium | - | - |
| 2 | Clear stadium site | 70 | - |
| 3 | Demolish surrounding buildings | 30 | 2 |
| 4 | Set up construction site | 70 | 3 |
| 5 | Drive support piling | 120 | 2 |
| 6 | Pour lower concrete bowl | 120 | 5 |
| 7 | Pour main concourse concrete | 120 | 3,6 |
| 8 | Install playing field | 90 | 3,6 |
| 9 | Construct upper steel bowl | 120 | 3,6 |
| 10 | Install seats | 140 | 7,9 |
| 11 | Build luxury boxes | 90 | 7,9 |
| 12 | Install jumbotron | 30 | 7,9 |
| 13 | Stadium infrastructure | 120 | 7,9 |
| 14 | Construct steel canopy | 75 | 10 |
| 15 | Light installation | 30 | 14 |
| 16 | Build roof supports | 90 | 6 |
| 17 | Construct roof | 180 | 16 |
| 18 | Install roof tracks | 90 | 16 |
| 19 | Install roof | 90 | 17,18 |
| 20 | Inspection | 20 | 8,11,13,15,19 |

For purposes of this case assume the following:

1. The following holidays are observed: January 1, Thanksgiving Day (4th Thursday in November), and December 25.
2. If a holiday falls on a Saturday then Friday will be given as an extra day off, and if it falls on a Saturday or Sunday then Monday will be given as a day off.
3. The construction crew work Monday through Friday.

**Assignment:**

You have been hired as a consultant to help G&E by applying project management techniques to this project. Prepare a report for G&E that addresses:

1. A visual presentation of the activity relationships through the use of a network diagram. Use MS Project.

2. Identify critical path.

3. Determine the expected length of time required to complete this project.

4. Identify two tasks that might be candidates for overtime work if a reduction in the expected completion time is required.

5. There is a possibility of labor strike by the seat manufacturer’s employees. If struck takes place it may last one or two months. What will be the financial and schedule impacts of a 30 working days or 60 working days strike by the seat manufacturer's employees on this project.