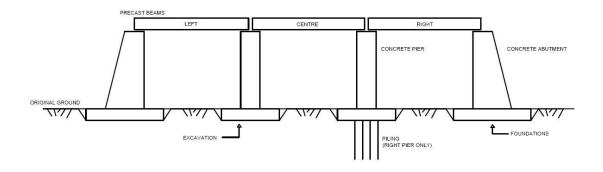
## CE 332 CONSTRUCTION ENGINEERING AND MANAGEMENT

## **SPRING 2013**

## MS PROJECT RECITATION



Activity Number	Activity Description	Duration (weeks)	Dependence	Resource Demand
1	Set up site	1	-	
2	Excavate left abutment	6	1	Excavator
3	Excavate left pier	4	1	Excavator
4	Excavate right pier	4	1	Excavator
5	Excavate right abutment	6	1	Excavator
6	Piledriving to right pier	7	4	
7	Foundations left abutment	8	2	Concrete team for foundations
8	Foundations left pier	6	3	Concrete team for foundations
9	Foundations right pier	6	6	Concrete team for foundations
10	Foundations right abutment	8	5	Concrete team for foundations
11	Concrete left abutment	9	7	Concrete team for abutments and piers
12	Concrete left pier	7	8	Concrete team for abutments and piers
13	Concrete right pier	7	9	Concrete team for abutments and piers
14	Concrete right abutment	9	10	Concrete team for abutments and piers
15	Place beams left span	4	11,12	Crane
16	Place beams centre span	4	12,13	Crane
17	Place beams right span	4	13,14	Crane
18	Clear site	1	15,16,17	

You are required to develop two schedules for a bridge construction project. The activities, precedence (dependence) relations and resource requirements for the project are given in the table. The project is planned to start at June 1, 2013 and there are no holidays in the work schedule (there will be no holidays on Saturdays, or Sundays, or on official holiday dates). When developing the schedules:

- a) Assume that: There are no resource-constraints (you have unlimited number of resources available).
- **b) Assume that:** The availability of each resource is one. (There is 1 excavator team, 1 concrete team for foundations, 1 concrete team for abutments and piers, and 1 crane team).