



## MODULE 05 – SITE LOGISTICS

Understanding the way that a construction site is developed and how it evolves over time is crucial to the success and safety of any project, especially when working around simultaneous construction sites including a parking deck and site improvements.

Objective: Using the Gene Theory plan pages provided, you are tasked with creating a proposed site logistics map for **each of the project phases**. As the project progresses, materials and personnel will change with the workflow. Answer the questions below and use the prompts to inform your map deliverables.

1. Projects aren't built from the sidelines! Having a strong site team presence is crucial to resolving issues in the field as they occur. **In your GC's and SOV Modules**, you should have estimated the size and make up of your on-site project team. Please use this information to determine how large your site office needs to be. Be sure to locate your team trailers on your site logistics map.
2. In an ideal world, construction projects would be built instantly and all at once, but the confines of time and space force us to adapt our approaches. Every project has unique set of needs. Consider the sequence of work as you create the logistics plan. Consider the material and equipment needed for each phase of work. How will these products, tools and people move in and out of the structure?
3. Be aware of your surrounding areas! This project is taking place adjacent to and simultaneous with site improvements and a parking structure. For DPR to maintain a safe environment for both laborers and civilians, clear delineation and protection from hazardous areas is crucial. On your site logistics map, please identify your construction fence boundaries, emergency egress paths, and safe evacuation zones.
4. Accounting for crew size and adjacent projects, indicate where workers will park and how vehicles will move around the site.
5. Does your project require temporary stairs, scaffolding or hoists? Show them on your map.
  - a. When do they need to be erected and when can they be taken down?
  - b. **Be sure to include these items in your Schedule and GC modules.**
6. Based on your understanding of the project, identify a material laydown area (if needed).
  - a. What materials will need to be stored?
  - b. Where will you put them to be most effectively unobstructed and accessible?
  - c. Do your materials need to be protected from the elements?
  - d. Will this area be adequate for all phases of the project or will future phases look different?
  - e. Explain how a project can reduce the need for on-site material storage.
7. How is your team planning on getting materials to floors above the first?
  - a. What is the heaviest thing you will need to lift on this project?
  - b. Is there a service elevator? Will you need use a tower crane? Mobile RT cranes? Man-lifts? Buck hoist? Please provide some backup for your decision including maximum load and ROM cost.
  - c. Where will it/they be located?
  - d. How long will you need it/them for? Will it/they stay for an extended duration or be brought to and from the site as needed?
  - e. **Be sure to include these items in your Schedule and GC modules.**



8. In case of emergency, every site needs to provide a fire lane for fire trucks and ambulances. Based on where your project is being built, what does the local code say about how wide this lane needs to be? Please identify on your map.
9. The number of porta-potties, hand-wash stations, fire extinguishers, and dumpsters required on a jobsite is dictated by your peak crew size. Are there local or national codes that provide guidelines for these things?
  - a. Based on your schedule – what will be your peak crew size on site?
  - b. Where (on the map) will you locate the temp. facilities? Please consider site coverage and spacing.
  - c. How many of each will be needed? Provide a short justification.

Questionnaire (for your responses):

1. Maximum On-Site Project Team Size:
2. How large is your office trailer:
3. How many areas does your project have?
4. Can all the workers in the building safely get out in the event of an emergency?
5. What is your peak labor force? How many parking spots do you need?
6. Does this project require scaffolding or temp stairs?
  - a. If so, from when to when?
7. Material Storage Questions
  - a. What materials are you storing on site?
  - b. Where will they be saved?
  - c. Do they require protection?
  - d. How can we reduce/eliminate this?
8. L2 and above?
  - a. What is the heaviest thing that you will need to lift?
  - b. How are you lifting construction materials? Provide backup information here.
  - c. Where?
  - d. For how long?
9. How does your site logistics plan change as the construction changes? Do different phases require different number of workers, bathrooms, or parking? Do different phases of the project provide options or challenges that were not available at the beginning?
10. Fire lane width?
11. Peak Site Crew Size?
  - a. How many porta-potties?
  - b. Hand Wash Stations?
  - c. Fire Extinguishers?
  - d. Dumpsters?

Required Deliverables:

1. Create a Site Logistics Plan for each of the construction phase. The number of construction phases is dependent on your means and methods, **you are responsible for creating a document that explains the logistical needs for each phase.** All logistic maps must be delivered in PDF format.
2. Copy and answer the questionnaire and **make sure your answers inform other relevant modules.**