Complete the following SEMP sections for:   
**The DARPA Urban Challenge – See Canvas/Course Documents – Or other Project**

# Technical Processes

For each item below, identify tasks and work products, why they are needed, organizational allocation of work, workflow (among organizations), processes, measurement, tools and databases, subordinate plans, and when the work products are needed. Refer to Slide 13 of Lecture 3 - "Technical Processes" for guidance on writing paragraphs in this and subsequent sections.

## Business/Mission Analysis

Analysis to define the mission problem or business opportunity from the user or acquirer perspective.

## Stakeholder Needs and Requirements Definition

Includes stakeholder identification. May include modeling and simulation.

## Requirements Definition, Validation, and Traceability

Analysis, validation, and traceability of stakeholder requirements. May include modeling and simulation.

## Architecture Definition and Traceability

Decomposition and allocation of requirements to the lowest level of architecture (configuration items). Includes interface identification.

## Design Definition and Traceability

Processes enable implementation of configuration items. Includes interface definition.

## System Analysis

Identify, plan, and perform analyses for other processes. May include modeling and simulation.

## Implementation

Includes procurement, prototype fabrication, software coding, Production (if applicable): Low-Rate Initial Production and Full-Rate Production.

## Integration

Include description of any facilities.

## Verification and Traceability

Include verification logic, and description of any facilities. For the DARPA Urban Challenge, the NQE should be treated as a Verification event.

## Transition

This is the deployment process: the transition from fabrication to operations. Include description of any facilities and transportation needs.

## Validation

Operational test and evaluation. Include description of any facilities. May include modeling and simulation. For the DARPA Urban Challenge, the “Final Event” should be treated as a Validation event.

## Operations

Operations Training, Operational Assessments (Type 4 testing), Corrections (Improvements), Increments, and Upgrades. Include description of any facilities. For the DARPA Urban Challenge, any additional “challenge” or other events after the Final Event would be considered part of Operations, also requiring Maintenance and training support.

## Maintenance

Logistics, Maintenance and Assessments (Availability, Reliability, FRACAS, Maintainability), Maintenance Training. Include description of any facilities.

## Disposal

Includes Retirement and Disposition: planned life, plans for disposition (including disposal).