	Duty/Task:																			
	D-5 Determine planting requirements																			
STEPS (Required to Perform the Task)		**PERFORMANCE STANDARDS (Observable & Measurable Criteria)**		**TOOLS, EQUIPMENT, SUPPLIES & MATERIALS (Needed)**		**REQUIRED KNOWLEDGE AND SKILLS (Math, Science, & Language)**		**SAFETY (Concerns)**		**WORKER BEHAVIORS (Important to Worker Success)**		**DECISIONS (Identify Decisions that Must be Made by the Worker)**		**CUES (Identify the Data Needed for Making Correct Decisions)**		**ERRORS (Indicate What May Result if Incorrect Decisions are Made)**	
1	Identify proper location for planting based on design layout	1	Location of planting matched design layout	1	Field layout schematic; GPS equipment	1	Mapping skills; computer skills	1	None	1	Accurate; detail oriented	1	How do I know I have the correct location? Do I need to mark the location?	1	Schematic	1	May select wrong location for planting; poor yield; replanting may be needed; wrong area may be prepped for planting
2	Determine the location's fitness for planting	2	Accurately determined fitness of planting location using ribbon testing and visual inspection, e. g. drainage, rocks, tree roots; soil and water test results	2	Hand lens; gloves; utility vehicle; shovel; soil and water testing supplies and results	2	Soil and plant fertility knowledge; diagnostic testing knowledge; knowledge of organic and sustainable farming practices and certification	2	None	2	Organized; detail oriented; accurate; observant	2	What should I consider to determine the fitness of the field? What evidence do I need that the field is fit? Is the field fit for planting?	2	Field characteristics; test results	2	Poor yield may result if the field is not conducive to crop growth; replanting may b e needed
3	Remove debris from the planting area	3	All debris, e.g. rocks, tree roots, were completely removed from planting area	3	Tractor and loader; shovels; gloves; safety glasses; PPE	3	Mechanical knowledge; safety knowledge; tractor operating skills	3	Observe equipment safety	3	Hard working; detail oriented; observant; organized	3	What needs to be removed? What is the most effective and efficient way to remove it? What are the conditions needed for removal? How can the debris be removed safely?	3	Size/amount of debris; visual assessment	3	Too much debris may result in broken or damaged equipment; poor plant stand; safety hazards
4	Determine if soil amendments are needed for planting e.g. sand, compost, fertilizer, manure	4	Correctly determined soil amendments needed based on test results and soil structure	4	Test supplies and results	4	Soil structure knowledge; diagnostic testing knowledge; knowledge of organic and sustainable farming practices and certification; soil science; food science knowledge	4	None	4	Decisive; detail oriented; observant; organized	4	What tests are needed to determine the correct soil amendments? What types and what amounts of amendments are required? When should the amendments be applied?	4	Soil test results, soil structure	4	Lack of amendments to alter soil structure will affect yeilds; safety to food supply; low crop yields
5	Determine tilling needs for planting	5	Determined the proper tilling method to produce a firm seed bed, e.g. discing, moldboard plowing, chisel plowing, rototilling	5	Soil probe; shovel	5	Mechanical knowledge; knowledge of tillage methods; safety knowledge; soil science; soil and plant fertility knowledge	5	None	5	Decisive; detail oriented; observant	5	What is the best method of tillage to use to prepare the soil? How do I know the field is ready for tilling? How do I know how much and what kind of tilling is needed? When should I recommend the tilling be done?	5	Soil compactness	5	Incorrect tilling methods used; low crop yields; inhibits seed germination
	Analyst: Mike Loyd						Specific Relevant References:													
	Expert Workers:																			
	Brad Bergefurd																			
	Rev. Donovan Larkins																			