

Report Date: 30 Oct 2013

**Summary Report for Individual Task
052-243-1532
Prepare Preliminary Drafting Sketches
Status: Approved**

DISTRIBUTION RESTRICTION: Approved for public release; distribution is unlimited.

DESTRUCTION NOTICE: None

Condition: Given a drafting scale, drafting triangles, mechanical pencil, eraser, and graph paper. This task should not be trained in MOPP.

Standard: Produce sketches depicting complete representation of an object (achitectural, mechanical, or site plan), proportionally drawn, with all required dimensions.

Special Condition: None

Safety Level: Low

MOPP: Never

Task Statements

Cue: None

DANGER

None

WARNING

None

CAUTION

None

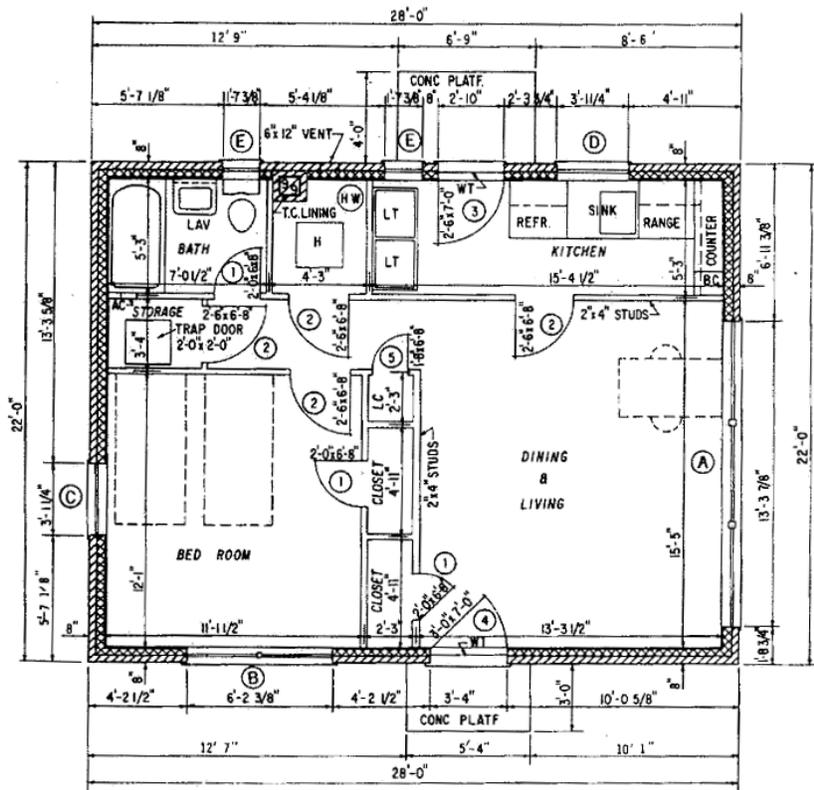
Remarks: None

Notes: None

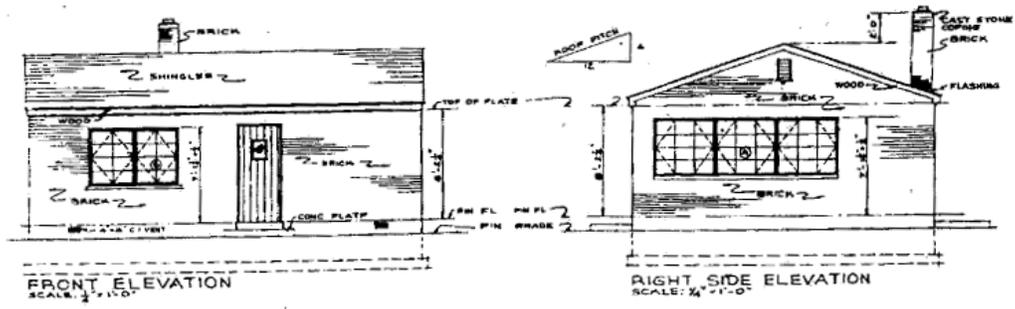
Performance Steps

1. Establish an approximate scale using graph paper to keep your sketch proportional.
 Note: Record field notes as deemed necessary.

2. Sketch the overall shape of the object (Architectural, Mechanical, or Civil) using light line strokes.
 Note: The following images are to be used for reference.
 - a. Floor plan, front elevation, side elevation (Architectural).



Typical Floor Plan



Typical Elevation Drawing

b. Front, top, right side (Mechanical).

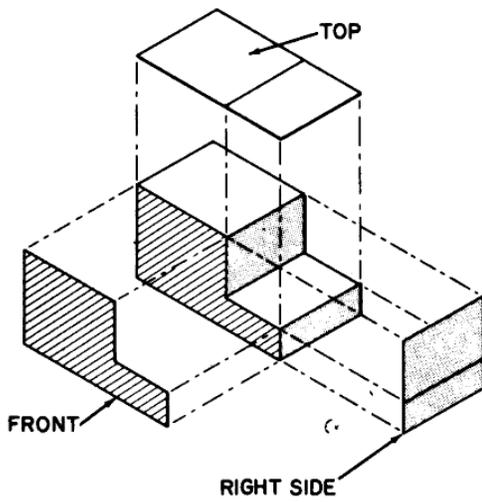


Figure 1-9. Interpretation of a three-view drawing.

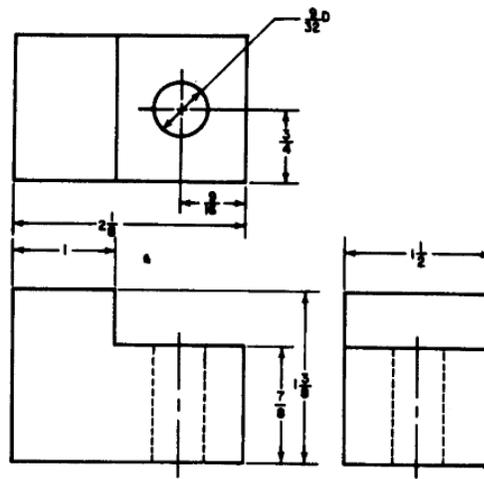
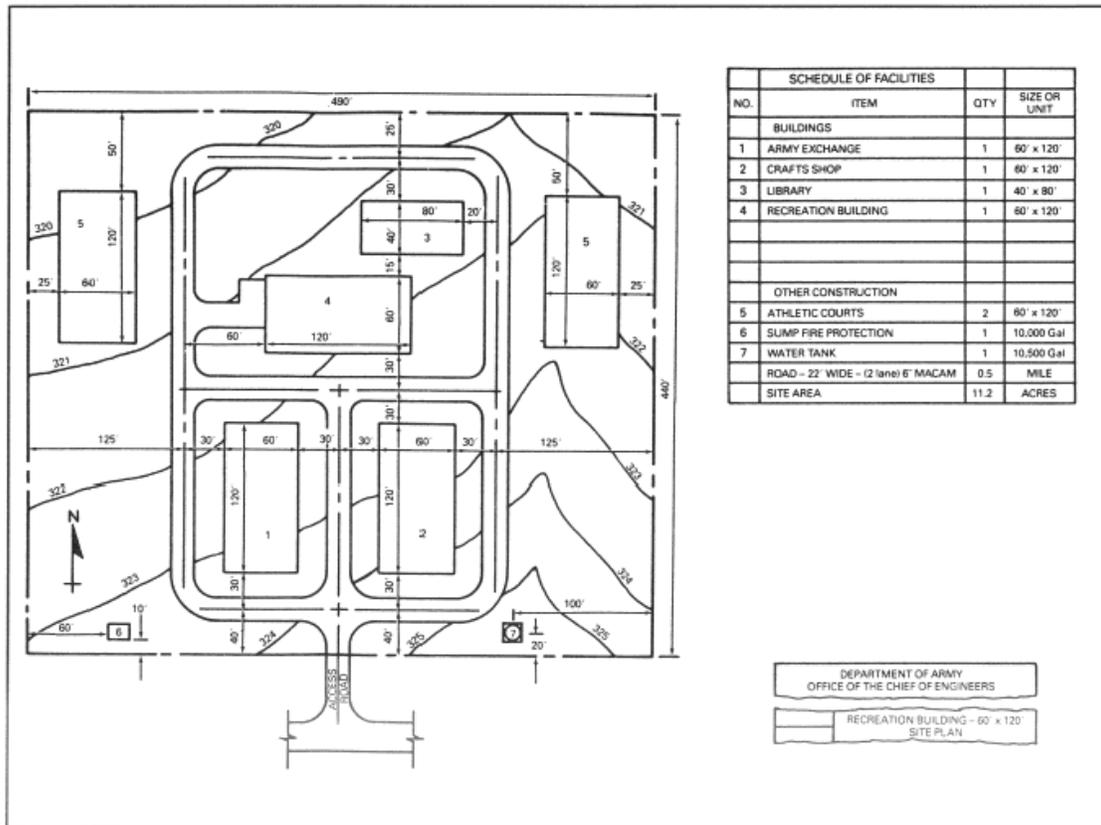


Figure 1-10. Hidden lines in a three-view drawing.

Typical three-view drawing.
Mechanical View

c. Site plan to include North arrow (Civil).



Typical Site Plan

3. Sketch the specific details of the object using light line strokes.

4. Dimension the object using the appropriate dimensioning style.

Note: Architectural dimensioning = Feet and inches
 Mechanical dimensioning = Decimal, fractions or metric
 Civil = Feet, or meters and decimal to the 1/100'

5. Complete the sketch by using heavy strokes to bold key lines and elements of the object.

(Asterisks indicates a leader performance step.)

Evaluation Preparation: Setup: Provide the Soldier with the items that are listed in the condition statement. Ensure that all safety precautions are followed. Prepare the testing site and equipment in advance to ensure that the task standard can be met.

Briefing: Give the Soldier a safety briefing and read the task, condition, and standard before starting the test.

PERFORMANCE MEASURES	GO	NO-GO	N/A
1. Established an approximate scale and proportion of the object.			
2. Sketched the overall shape of object in the required views using light strokes.			
3. Sketched the specific details of the object using light strokes.			
4. Dimensioned the object using the appropriate dimensioning style.			
5. Completed the drawing using heavy strokes to bold key lines and elements of the object.			

Supporting Reference(s):

Step Number	Reference ID	Reference Name	Required	Primary
	FM 5-430-00-1	Planning and Design of Roads, Airfields, and Heliports in the Theater of Operations - Road Design	No	No
	TM 3-34.47	Carpentry	No	No
	TM 3-34.55	Construction Surveying	No	No
	TM 5-704	Construction Print Reading in the Field. AFM 85-27.	No	No

Environment: Environmental protection is not just the law but the right thing to do. It is a continual process and starts with deliberate planning. Always be alert to ways to protect our environment during training and missions. In doing so, you will contribute to the sustainment of our training resources while protecting people and the environment from harmful effects. Refer to FM 3-34.5 Environmental Considerations and GTA 05-08-002 ENVIRONMENTAL-RELATED RISK ASSESSMENT. Environmental protection is not just the law but the right thing to do. It is a continual process and starts with deliberate planning. Always be alert to ways to protect our environment during training and missions. In doing so, you will contribute to the sustainment of our training resources while protecting people and the environment from harmful effects. Refer to FM 3-34.5 Environmental Considerations and GTA 05-08-002 ENVIRONMENTAL-RELATED RISK ASSESSMENT.

Safety: In a training environment, leaders must perform a risk assessment in accordance with FM 5-19, Composite Risk Management. Leaders will complete a DA Form 7566 COMPOSITE RISK MANAGEMENT WORKSHEET during the planning and completion of each task and sub-task by assessing mission, enemy, terrain and weather, troops and support available-time available and civil considerations, (METT-TC). Note: During MOPP training, leaders must ensure personnel are monitored for potential heat injury. Local policies and procedures must be followed during times of increased heat category in order to avoid heat related injury. Consider the MOPP work/rest cycles and water replacement guidelines IAW FM 3-11.4, Multiservice Tactics, Techniques, and Procedures for Nuclear, Biological, and Chemical (NBC) Protection, FM 3-11.5, Multiservice Tactics, Techniques, and Procedures for Chemical, Biological, Radiological, and Nuclear Decontamination. All operations will be performed to protect and preserve Army personnel and property against accidental loss. Procedures will provide for public safety incidental to Army operations and activities and safe and healthful work places, procedures, and equipment.

Prerequisite Individual Tasks : None

Supporting Individual Tasks : None

Supported Individual Tasks :

Task Number	Title	Proponent	Status
052-243-1302	Modify a Standard Army Facilities Component System (AFCS) Drawing	052 - Engineer (Individual)	Analysis
052-243-2201	Check Drawings and Sketches	052 - Engineer (Individual)	Analysis
052-243-4152	Prepare Design Specification Proposals for a Vertical-Construction Project	052 - Engineer (Individual)	Analysis
052-243-4155	Prepare Design Specification Proposals for a Horizontal-Construction Project	052 - Engineer (Individual)	Analysis
052-243-3400	Site Adapt a Standard Army Facilities Component System (AFCS) Drawing	052 - Engineer (Individual)	Analysis
052-243-3401	Review Drawings and Sketches	052 - Engineer (Individual)	Analysis

Supported Collective Tasks :

Task Number	Title	Proponent	Status
05-1-0719	Perform Quality Control Operations	05 - Engineers (Collective)	Approved
05-1-0725	Site-Adapt a Standard Construction Design	05 - Engineers (Collective)	Approved
05-3-5220	Construct a Wood Frame Structure	05 - Engineers (Collective)	Approved
05-3-5222	Construct a Steel-Frame Pre-engineered Structure	05 - Engineers (Collective)	Approved
05-3-5223	Construct a Concrete Structure	05 - Engineers (Collective)	Approved
05-6-0715	Coordinate Construction Operations	05 - Engineers (Collective)	Approved

ICTL Data :

ICTL Title	Personnel Type	MOS Data
12T10, Technical Engineer Specialist, Skill Level 1	Enlisted	MOS: 12T, Skill Level: SL1, Duty Pos: KIR