Carpentry

Level-II

Learning Guide-18

Unit of Competence: Read and Interprets plans and specifications

Module Title: Reading and Interpreting plans and specifications

LG Code: EIS CRP2 M05 LO3-LG-18

TTLM Code: EIS CRP2 M05 TTLM 0919v1

LO 3: Recognize commonly used symbols and abbreviations.

Instruction Sheet	Learning Guide 18

This learning guide is developed to provide you the necessary information regarding the following **content coverage** and topics:

- Recognizing Construction symbols and abbreviations
- Locating Legend on project drawings& interpreting symbols and abbreviations

This guide will also assist you to attain the learning outcome stated in the cover page. Specifically, **upon completion of this** Learning **Guide, you will be able to**:

3.1. Construction symbols and abbreviations are recognized.

3.2. Legend is located on project drawings, and symbols and abbreviations are correctly interpreted.

Learning Instructions:

1. Read the specific objectives of this Learning Guide.
2. Follow the instructions described below 3 to 6.
3. Read the information written in the information “Sheet 1, and Sheet 2”.
4. Accomplish the “Self-checks respectively.
5. If you earned a satisfactory evaluation from the “Self-checks” proceed to “Operation Sheets**.**
6. Do the “LAP test” (if you are ready).

Information Sheet-1	Recognizing Construction symbols and abbreviations

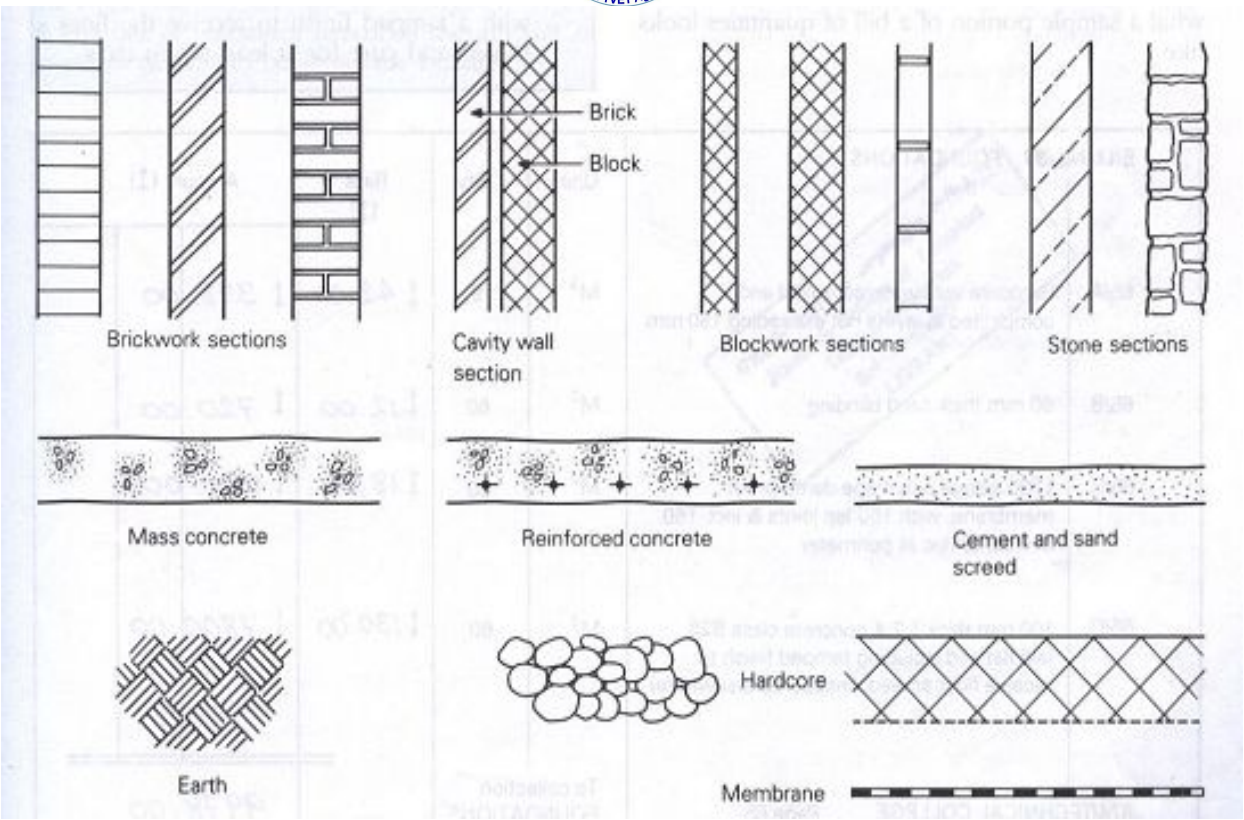
3.1. Recognizing Construction symbols and abbreviations

3.1.1 Symbols and abbreviations of drawings

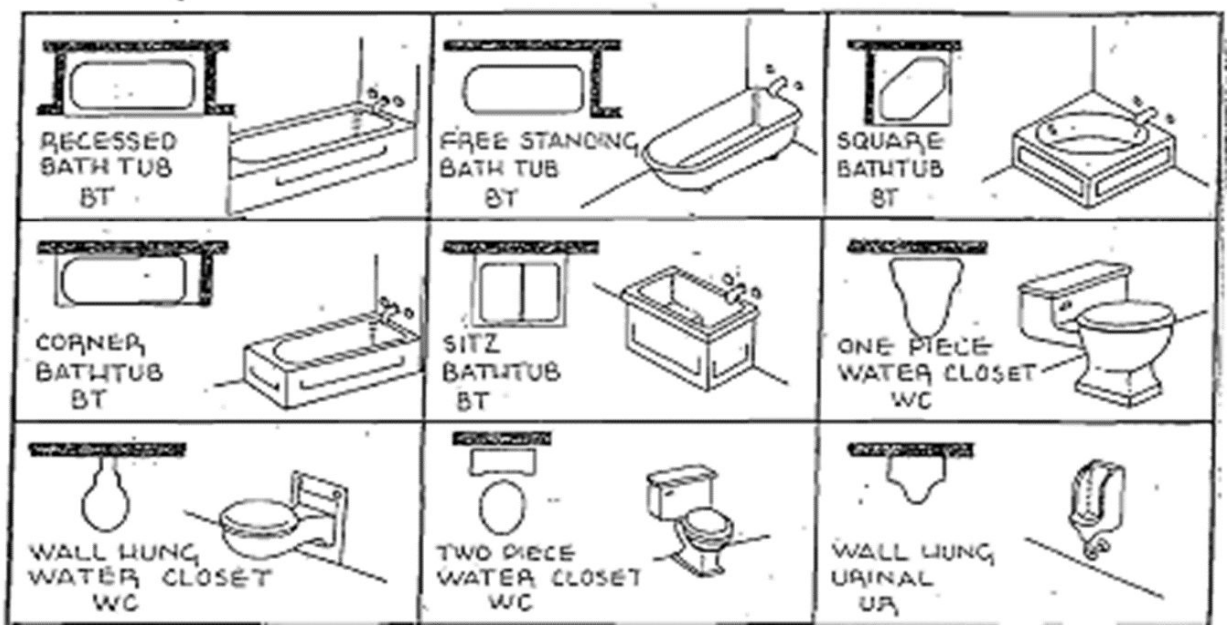
Some drawings need to convey a lot of information. To avoid confusion and to save space, abbreviations and symbols are used. These are standardized (used all over Australia), and you'll find that you soon become used to interpreting what they mean
A good drawing is pleasing to the eye. It communicates everything needed to manufacture a component in an easy to read way.
There is not a lot of space on a drawing so symbols and abbreviations are used instead of text.
Symbols: are concise and can be understood in any language. With a good drawing, someone who doesn't speak English can make the same component.

- **Symboles on working drawings**

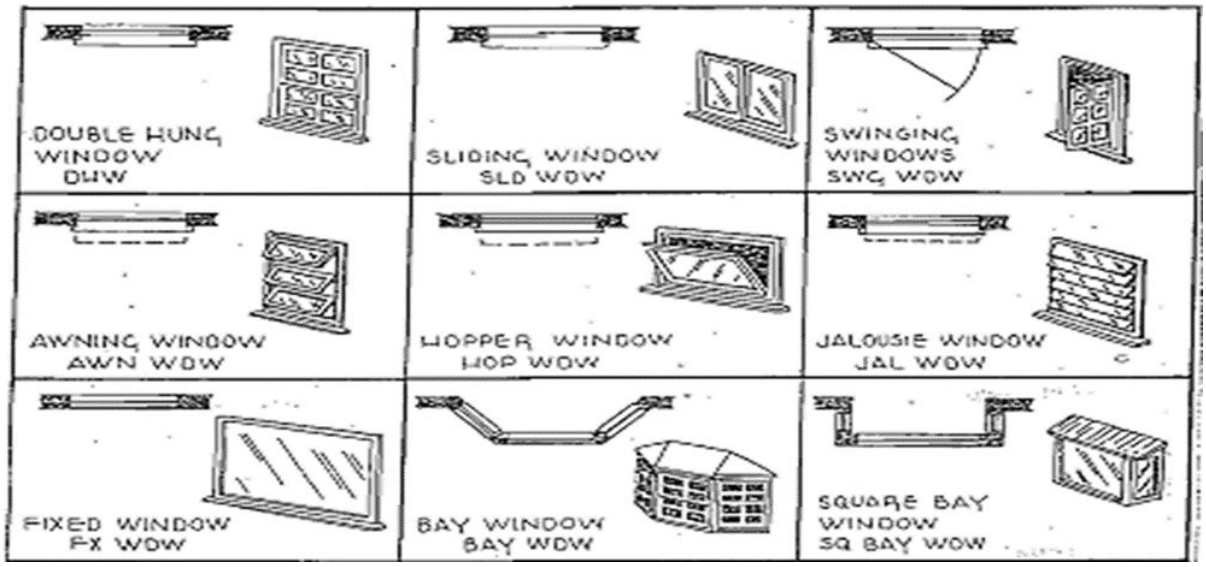
Working drawings use symboles to show the different materials specified in the construction of a bilding. These symbols are common to all drawings so that everyone on the buildind team can interpret them correctly. The most familiar symbols are listed below


Brick
Block
Brickwork sections
Cavity wall section
Blockwork sections
Stone sections
Mass concrete
Reinforced concrete
Cement and sand screed
Hardcore
Earth
Membrane

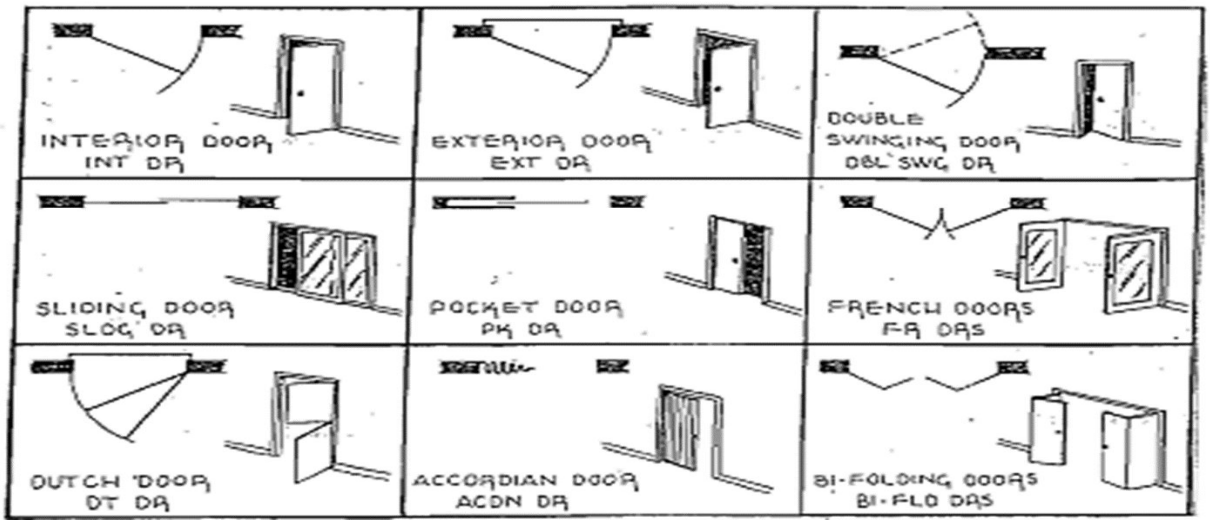
PLUMBING SYMBOLS



WINDOW SYMBOLS



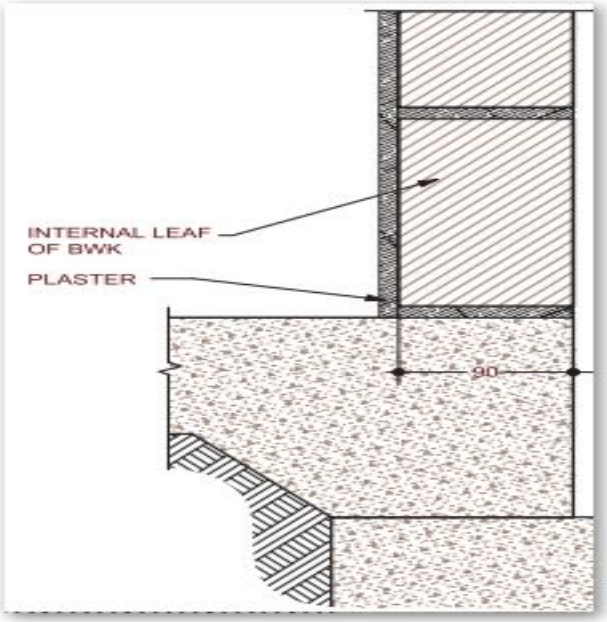
DOOR SYMBOLS



Abbreviations: also save space on the drawing. They save time too because instead of writing the full word, you can use the abbreviation.

Abbreviations can be created in different ways. In some cases the word is shortened. Examples include ‘ENS’ for en suite and ‘CPBD’ for cupboard. In other cases initials are used. Examples include ‘WIR’ for walk-in robe and ‘WC’ for water closet (toilet). There might be several recognized abbreviations for the same thing. For example, you may see ‘brickwork’ shortened to BRK, BWK or just BK.

If you come across a new abbreviation in a drawing and you aren’t sure what it means, have a look at where it is in the drawing as that will often give you a clue



Self-Check -1	Written Test

Directions: Say true or false for the questions listed below. Use the Answer sheet provided in the next page:

1. Plans and drawings can be easily understood without symbols and abbreviations
2. One of the functions of symbols are show the different materials specified in the construction of the building
3. Symbols and abbreviations are used instead of drawings
4. Symbols and abbreviations are used instead of text
5. Abbreviations save space but not time

Note: **Satisfactory rating - 3 points** **Unsatisfactory - below 3 points**
You can ask you teacher for the copy of the correct answers.

Answer Sheet

Score = _____
Rating: _____

Name: _____ Date: _____

1. ----------
2. ----------
3. ----------
4. ----------
5. ----------

Information Sheet- 2	Locating Legend on project drawings & interpreting symbols and abbreviations

3.2. Locating Legend on project drawings & interpreting symbols and abbreviations

3.2.1 Legend

Each line on a construction drawing has a specific design and thickness that identifies it. The identification of these lines and other symbols is called the legend.

Abbreviations, Symbols, & Keynotes for each project should be noted on the title sheet or other introductory drawing page such as the legend page.

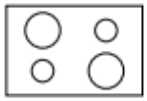
3.2.2 Interpreting symbols and abbreviations

- **Symbols**

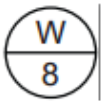
Like abbreviations, symbols are used instead of words on drawings to save space.

There are a lot of them, but they're standardized (drawn the same way) to avoid confusion, so don't worry. Some of them look a lot like what they represent.

For example, the symbol:

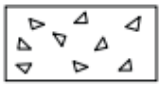
 Indicates a hotplate in the kitchen.

Others are more obscure. The symbol:



Indicates that this is 'window 8'.

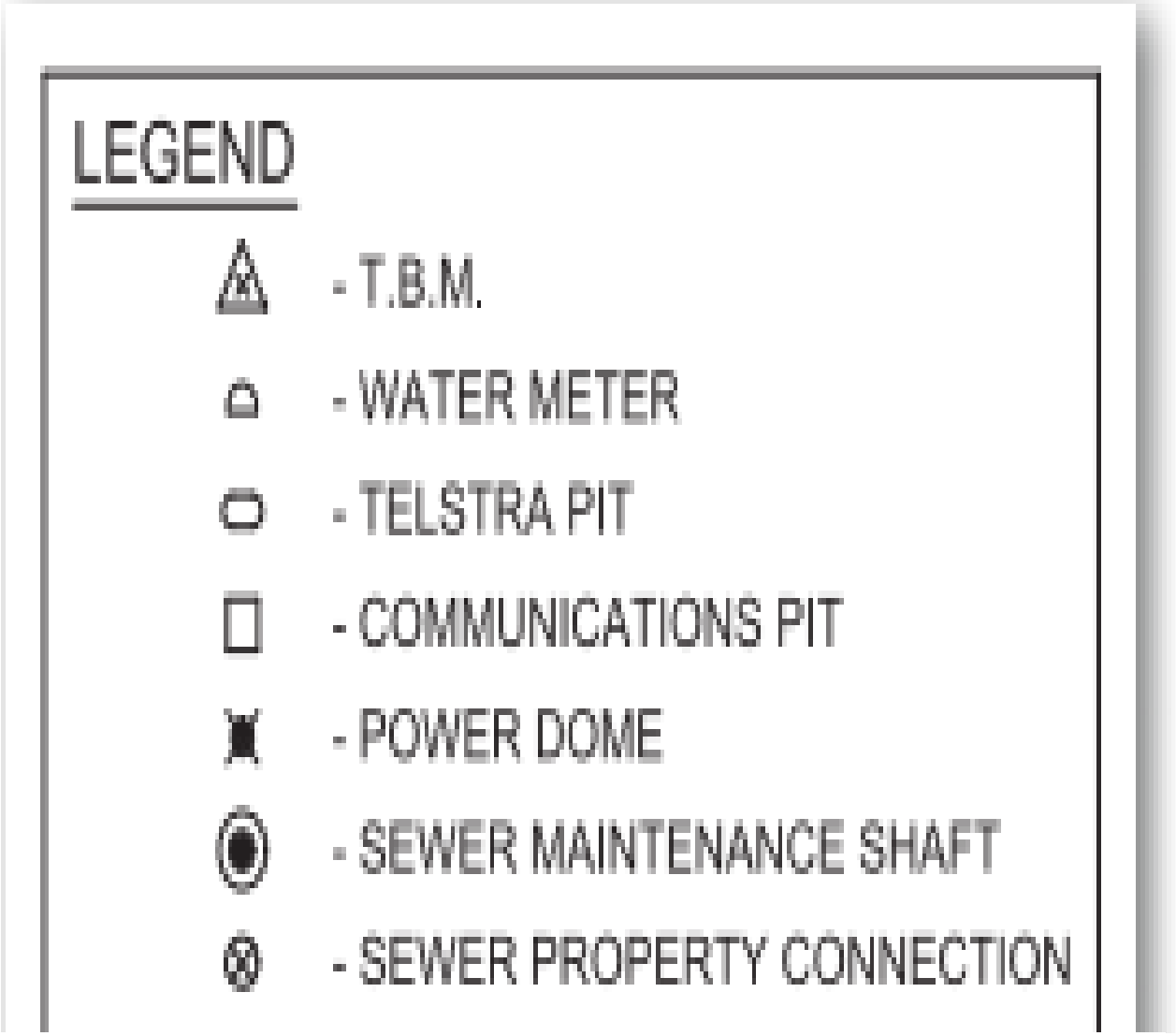
Some cross-sections have a 'filling' that symbolizes what material is to be used. In drafting terms this is called 'hatching'. For example, this hatching:

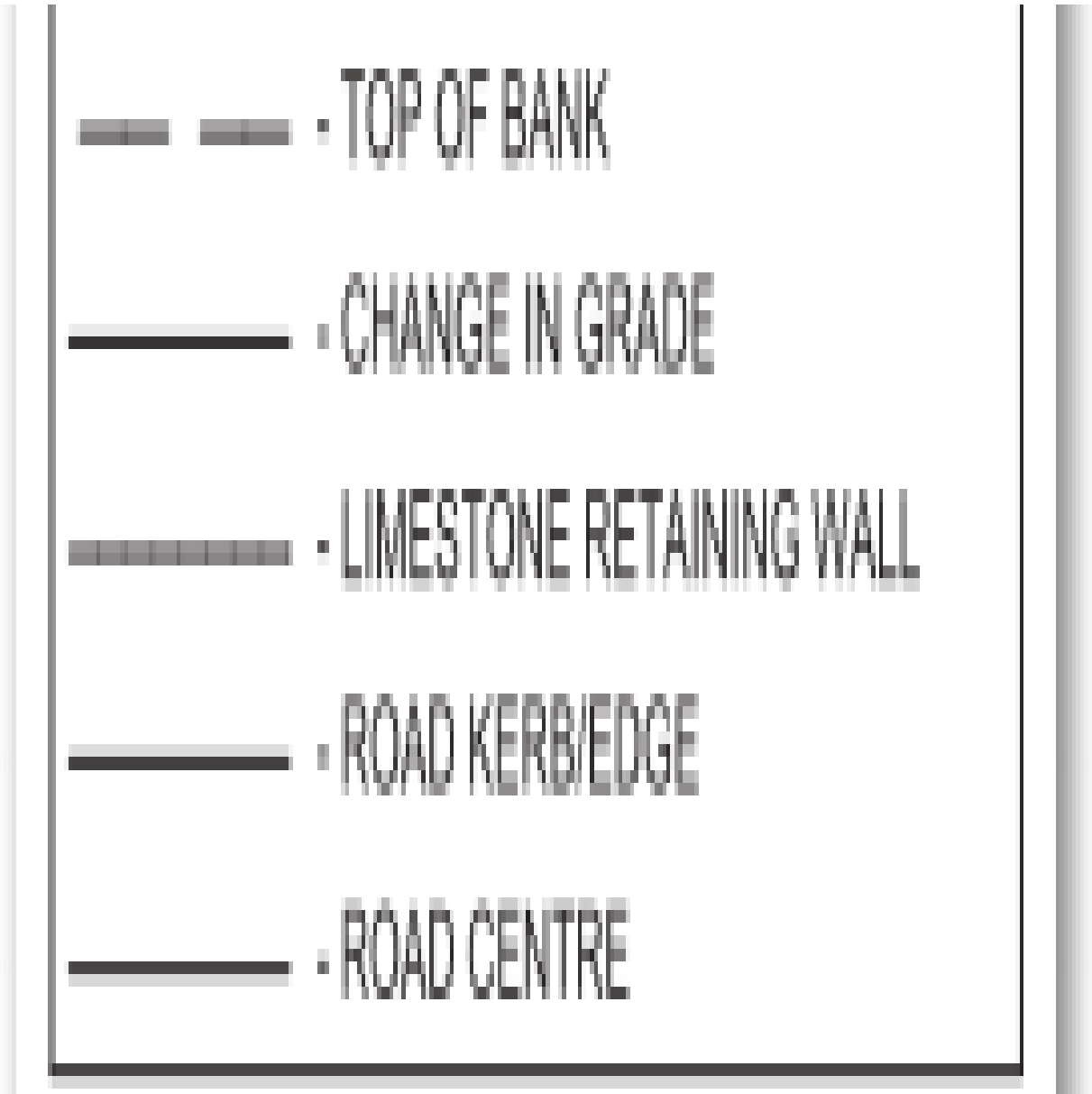
 Indicates that it is a concrete member (perhaps a footing).

As mentioned before some drawings have a legend to indicate what the symbols used on the drawing mean.

The legend shown in below is from a site plan. Without this legend, the symbols on the drawing could be misinterpreted.

Electrical, hydraulic and engineering drawings commonly have legends on them.




TOP OF BANK
CHANGE IN GRADE
LIMESTONE RETAINING WALL
ROAD KERB/EDGE
ROAD CENTRE

Self-Check -2	Written Test

Directions: Saying True or False for the questions listed below. Use the Answer sheet provided in the next page:

1. Geometry is one of critical information that expressed by drawing
2. The metric size of drawing is corresponds to international paper sizes
3. It is possible to draw buildings or parts of building to their actual size
4. Abbreviation save space on the drawing and also save time
5. Amount of something that there is , was or will be is known as quantity

Note: **Satisfactory rating - 3 points** **Unsatisfactory - below 3 points**

You can ask you teacher for the copy of the correct answers.

Answer Sheet

Score = _____

Rating: _____

Name: _____ Date: _____

1. ----------
2. ----------
3. ----------
4. ----------
5. ----------

Table of Answer keys for the self checks provided on each information sheets

UNIT OF COMPETENCY: Read And Interpret Plan And Specification							
LO: 3 LG: 18 Recognize commonly used symbols and abbreviations.							
Self check: 1		Self check:2		Self check:3		Self check:4	
True or False		True or False					
1	False	1	True	1		1	
2	True	2	True	2		2	
3	False	3	False	3		3	
4	True	4	True	4		4	
5	False	5	True	5		5	

List of Reference Materials

References hand and power tools

- Design drawings and technical specifications AUTHORS: Rod Davis and Ross Stafford
- Designing Buildings
- Architectural Working Drawings8Ch
- Specifications, Tolerances, and Other Technical Requirements for Weighing and Measuring Devices
- Specifications, Tolerances, and Other Technical Requirements for Weighing and Measuring By Devices Henry V. Oppermann, Chief NIST Weights and Measures Division Gaithersburg, MD 20899-2600
- Ethiopian Building Cod Standards ministry of work and urban development
- **Engineering drawing abbreviations and symbols**
- From Wikipedia, the free encyclopedia
- READ AND INTERPRET PLANS AND SPECIFICATIONS CERTIFICATE II IN BUILDING AND CONSTRUCTION (PATHWAY – PARAPROFESSIONAL) CPCCCM2001A LEARNER'S GUIDE on BUILDING AND CONSTRUCTION

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