LANDSCAPE ARCHITECTURE 1

(LANDSCAPE ARCHITECTURAL DRAWINGS)

GROUP 8

MOMANYI M. PETER ORWA KEN-ALBERT JIRONGO RUBY KIPKOGEI VINCENT RUKUNDO EMMANUEL NJERUH JONATHAN WERE SHARON B02/0981/2014 B02/0890/2013 B02/31698/2014 B02/0980/2014 B02/31643/2014 B02/0971/2014 B02/31704/2014

1. MASTER PLAN

ORWA KEN-ALBERT KURIYAMA B02/0890/2013

1. MASTER PLAN

- It is the first 2D drawing that is prepared after the site inventory and analysis.
- It contains details of all aspects of the design of the site and how multiple spaces will function together to make a cohesive composition.
- One can make a preliminary master plan to quickly depict the phenomena that are on the place that is being represented

TYPES OF MASTER PLANS

1. Master Plan as a drawing

 This is a preliminary 2D drawing that shows the proposed ultimate site development. They often comprise site work that must be executed in phases over a long time and are thus subject to drastic modification

2. Master Plan as a document

• This is a document that contains statements and points that set out how a particular area can develop and redevelop in the future.

Basically a master plan can be a drawing which shows the proposed development, or a document typed out in words that describes the stages of the proposed development

MASTER PLAN AS A DRAWING

a) Preliminary Master Plan

It is usually done freehand and contains

- Property line
- Existing topography
- Adjoining roads/streets
- Plinths of all structures and the major design elements



MASTER PLAN AS A DRAWING

b) Final Master Plan

- Precisely drawn (either using drafting equipment or CAD)
- Contains all that is in the preliminary master plan, but there is precision in form, dimension and indication of materials to proposed elements

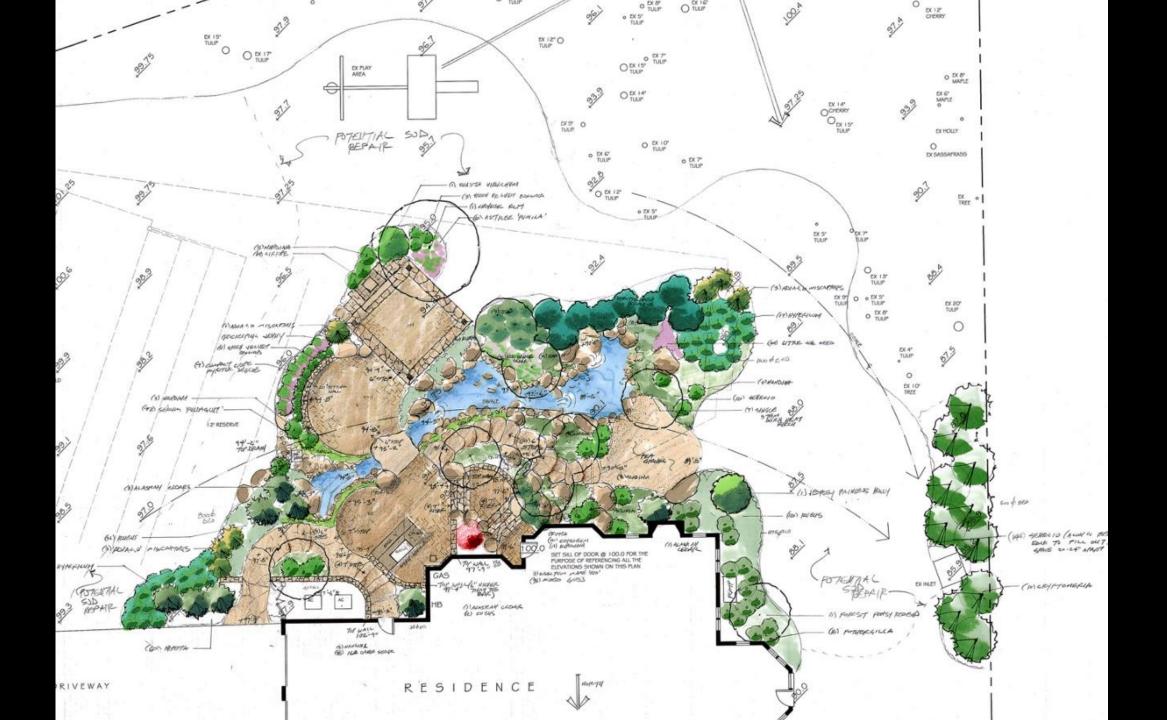


2. SITE PLAN

ORWA KEN-ALBERT KURIYAMA B02/0890/2013

2. SITE PLAN

- A dimensioned drawing indicating the form of an existing area and the physical objects existing in it and those to be built or installed upon it
- Shows the proposed landscape design and includes the relevant including existing conditions as well
- Shows the overall layout of the major design elements
- It's presented to the client to give a picture of how the site will be constructed
- Usually done from a scale of 1:100 to 1:1000



Master Plan vs Site Plan

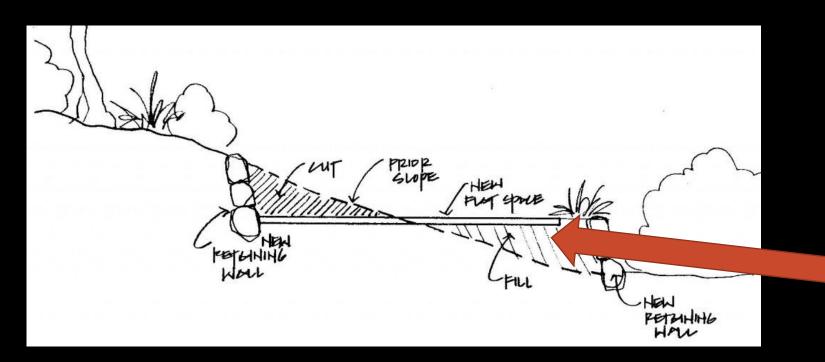
- The two terms are often used interchangeably but they are different
- They may both show the same things, however, a master plan is more of a preliminary proposal where the elements of the design are highlighted and are subject to change
- On the other hand, a site plan is more detailed even to the level of dimensioning and positioning of the elements
- A master plan can also refer to the document, but a site plan can only be a drawing

3. GRADING PLAN

JIRONGO RUBY B02/31698/2014

SITE GRADING

- Site grading is the design or use of either a level base or slope for
- 1. Construction work
- 2. Landscaping and garden improvements
- 3. Surface drainage
- 4. Foundation or the base coarse for a road or railway.
- Grading is an integral part of landscape architectural design and should be considered simultaneously with the layout of functions and forms in plan

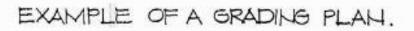


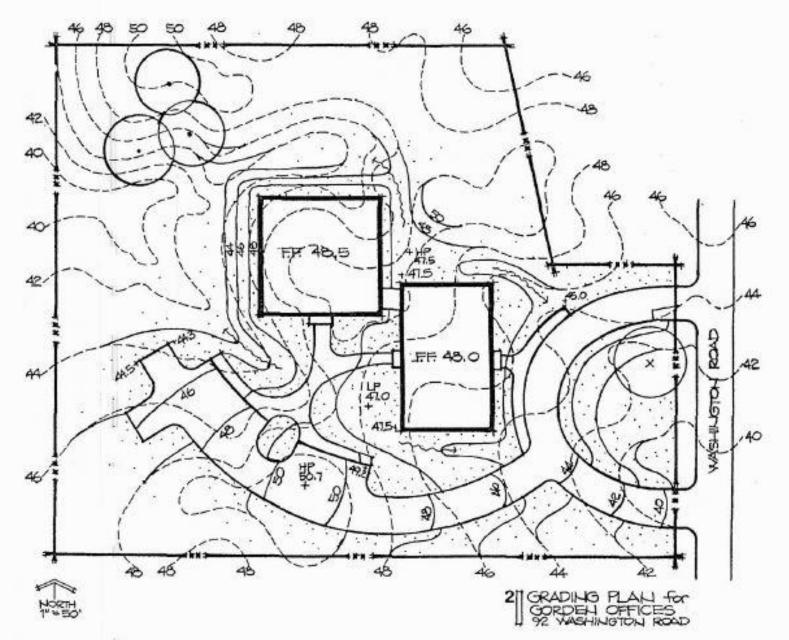
- The vertical manipulation of the land is fully as important as the horizontal organization of spaces and functions themselves.
- Usually grading on a given site requires both cut and fill. Fill can be identified on a plan when a proposed contour is moved downhill from the existing contour location.

Fill - when soil is added to a portion of the site
through grading
Cut - is the taking away or
excavation of soil from a portion of the site

GRADING PLAN

- A plan drawn specifically to show the proposed grading of a site is termed a <u>"grading plan"</u>
- It shows both existing and proposed contour lines as well as the outline of all buildings, roads, walks, walls, and other structural elements of the design.
- The grading plan, which is one of many construction drawings, also shows the location of drainage structures such as drop inlets and catch basins as well as precise elevation at specific points throughout the site by means of spot grades.



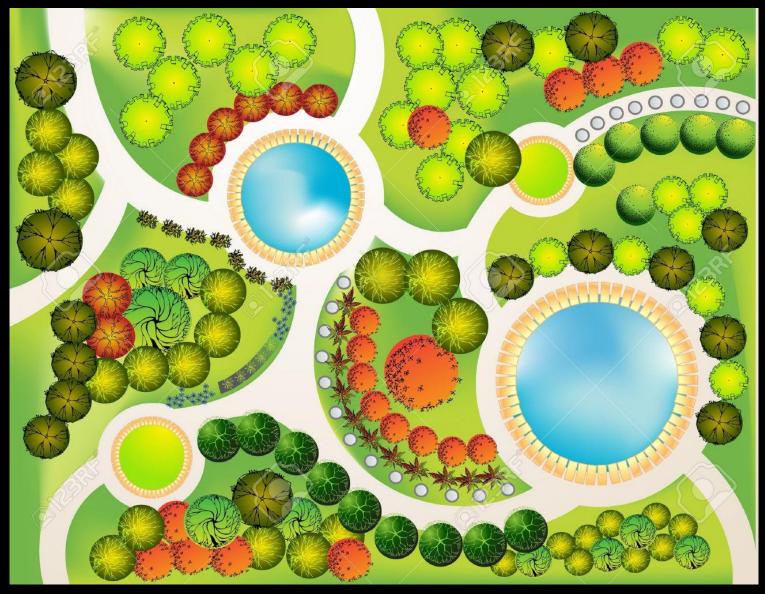


 Site grading plans must not only solve practical requirements and meet various governmental standards but also create landforms that contribute to the aesthetic ambitions of overall landscape site design and architectural design concepts.

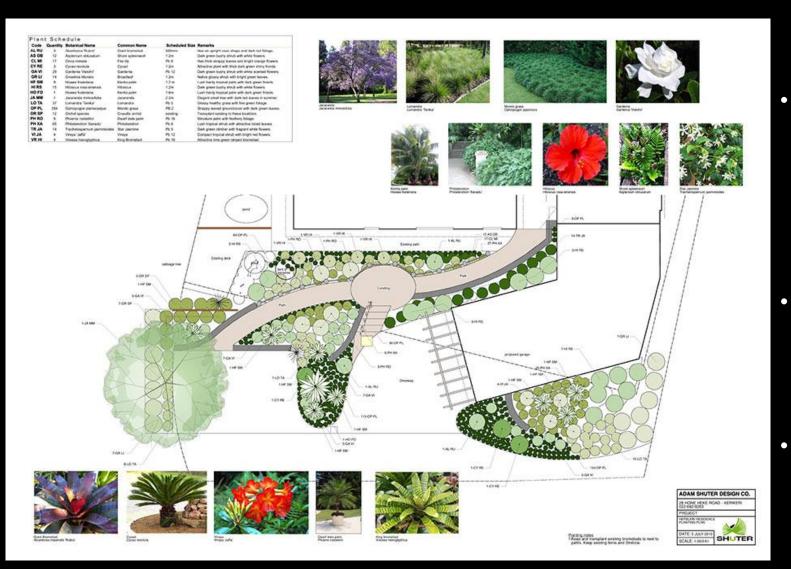
4. PLANTING PLAN

RUKUNDO EMMANUEL B02/31643/2014

Example of a planting plan



RUKUNDO EMMANUEL B02/31643/2014



A Planting plan is one which shows the arrangement, type and scheme of plants, trees and other forms of vegetation/plant materials to be used on the site.

 It has a legend explaining the type of plant material to be used on the site.

• This plan verifies number of plants, tree count, grass coverage and square footage.

5. LAYOUT PLAN

RUKUNDO EMMANUEL B02/31643/2014

Example of a layout plan





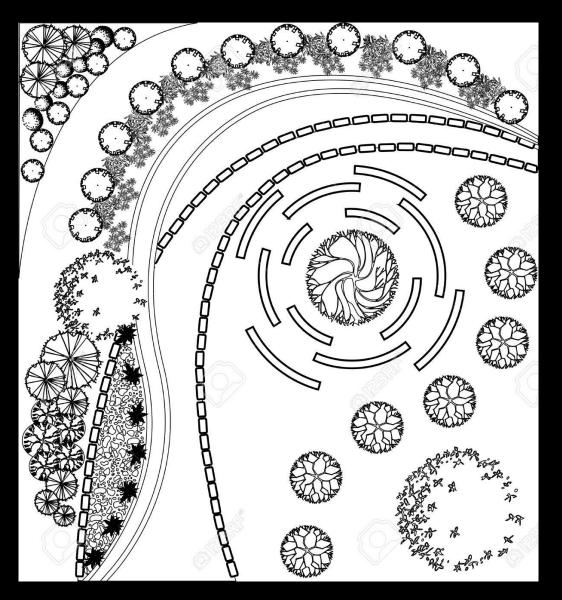
- A layout plan is a construction drawing showing design or schematic arrangement of an area to be built.
 - It shows proposed or existing buildings, walkways, walls, parking spaces, steps, plants, hedges and other landscape forms, and how they fit together.



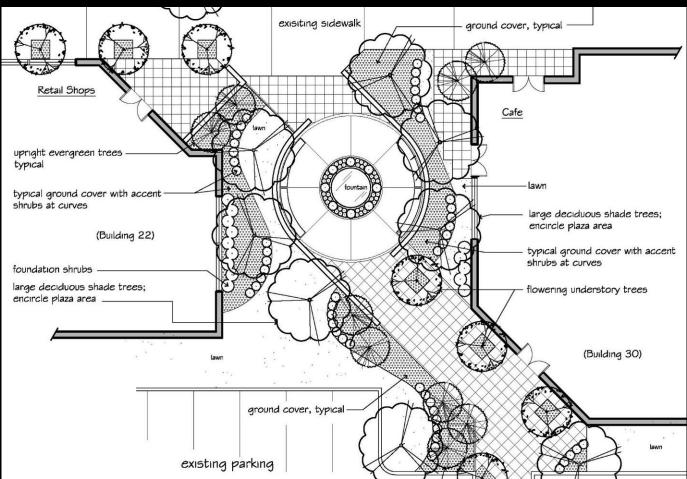
- It provides minimum distance between plants and buildings (4ft from the face of a building or pavement)
- Alignment and spacing between trees.
- Various graphics are used to differentiate the plant materials to be used.



- There is use of different graphic matter on the plan to show type of material/greenery and its coverage on site.
- This is to establish overall appearance, relative importance and relationship between the materials and to achieve a smooth flow of information and eye movement for maximum effectiveness.



• Other layout plans are prepared to explore different arrangements before the final layout is made.



6. LIGHTING PLAN

SHARON PHILLIPA WERE B02/31704/2014

INTRODUCTION

Architectural lighting design is a field concerned with the design of lighting systems including natural light, electric light, or both, to serve human needs.

Lighting has a profound effect on the look and feel of a space and can greatly influence :ones interaction with a building Major factors that are considered to achieve a working lighting plan:

- The measure of function the lighting plays
- The aesthetic appeal of the space
- The energy efficiency to make sure light is not wasted (over-illumination)

To achieve this, one must take into account:

• Purpose

This is the kind of human activity for which the lighting is to be provided

• Size

This is the area of the space to be covered which determines the amount and distribution of light required

• Type

Different types of lighting perform differently e.g. the colour of lights chosen may affect how one views the space as a whole

• Fixtures

Main purpose is to be put in a way to avoid glare They come in a variety of styles for various functions.

Examples of light fixtures

- Dimmer
- Motion detector
- Timer
- Touch
- 3 way 2 circuit switch
- X10 systems

TYPES OF LIGHTING

General lighting - provides an area with general illumination

Task lighting - used in the performance of specific duties

Accent lighting - concentrated light on an area to to create a visual point of interest

LANDSCAPE LIGHTING

This enhances beauty of a property while providing safety and security

Lighting provides safe travel along a pathway and also a gorgeous view by enjoying landscaping even in the dark

LIGHTING STRATEGIES

Downlighting- creates a gentle diffuse light by aiming light downwards

Uplighting-light is aimed upward to emphasize on the contrast of dark shadows and bright light

Crosslighting- eliminates shadows by lighting a focal point from both sides







COMMON AREAS TO BE LIT

- Pathways
- Patios
- Driveways
- Trees
- Water features
- Architectural elements







Keep in mind :

Views from indoors - the lighting design must be integrated with the landscape

Focal points- 1 or 2 areas to draw attention to. Usually a structure with the the best shadow effect

Creating a sense of depth

Ambient vs Spotlighting

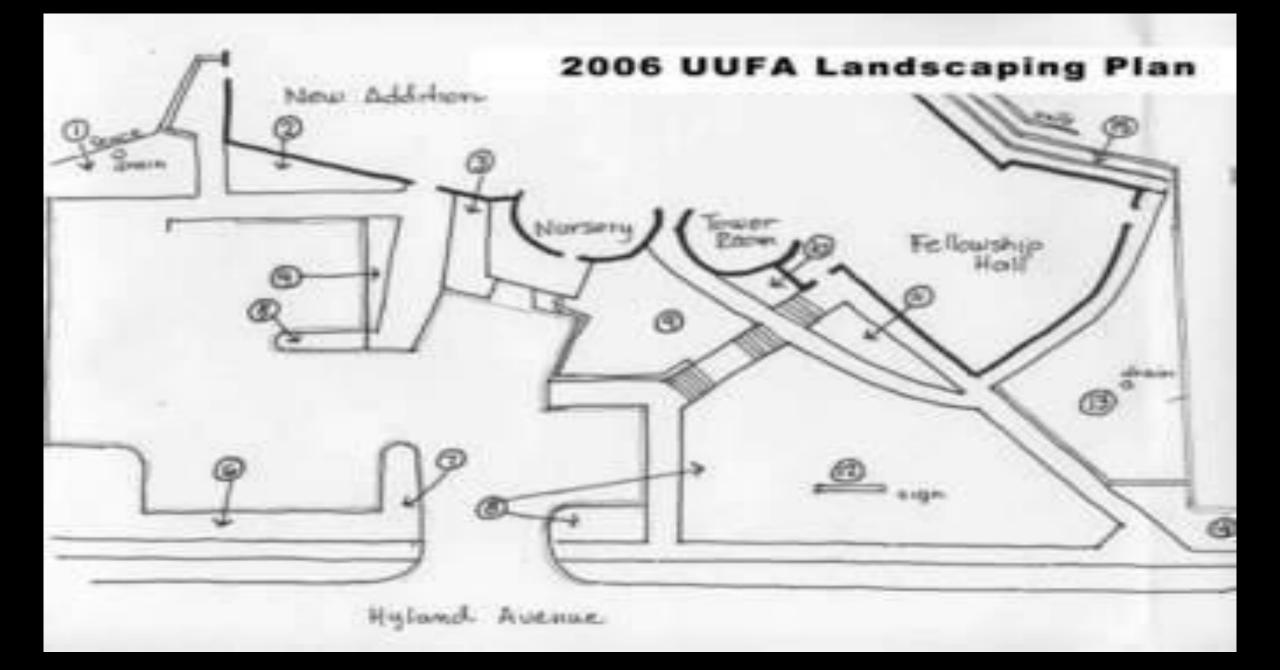
THINGS TO AVOID

- Lack of variety- add visual interest to the nightime landscape eg use of spotlights, floodlights, pathlights
- Glare, Light pollution, Light trespass- light sources should be hidden to prevent direct glare and trespass to another space

Over-symmetrical fixture placements
Unbalanced lighting- should be placed in ways to balance the entire canvas of a property and

not divide it.

• over exaggerating a style



7. IRRIGATION PLAN

NJERUH JONATHAN B02/0971/2014

IRRIGATION PLAN

- <u>Irrigation</u> is the artificial application of water to the land or soil.
- It is used to assist in the growing and maintenance of landscaping planters and revegetation of disturbed soils
- It influences the appearance of a landscape and brings a given feeling depending on the type and pattern

Types of irrigation

SPRINKLER IRRIGATION

- Water is applied in form of sprays sometimes simulating natural rainfall.
- If well planned, designed and operated, it can be used in sloping land to reduce erosion where other systems are not possible.





Use of sprinkler systems in enhancing landscape







Design of Sprinkler Irrigation System

Objectives and Procedures

- Provide Sufficient Flow Capacity to meet the Irrigation Demand
- Ensure that the Least Irrigated Plant receives adequate Water
- Ensure Uniform Distribution of Water.

TYPES OF IRRIGATION

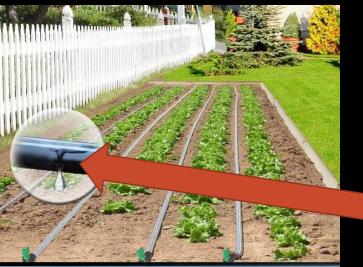
SURFACE IRRIGATION

- Water is applied to the field in either the controlled or uncontrolled manner.
- Controlled: Water is applied from the head ditch and guided by corrugations, furrows, borders, or ridges.
- Uncontrolled: Wild flooding.
- Surface irrigation is entirely practiced where water is abundant. The low initial cost of development is later offset by high labour cost of applying water. There are deep percolation, runoff and drainage problems



DRIP OR TRICKLE IRRIGATION





Water is applied directly to the crop i.e. entire field is not wetted

There is a low pressure system.

Drip line

- There is a slow rate of water application somewhat matching the consumptive use.
- There is reduced evaporation, only potential transpiration is considered.

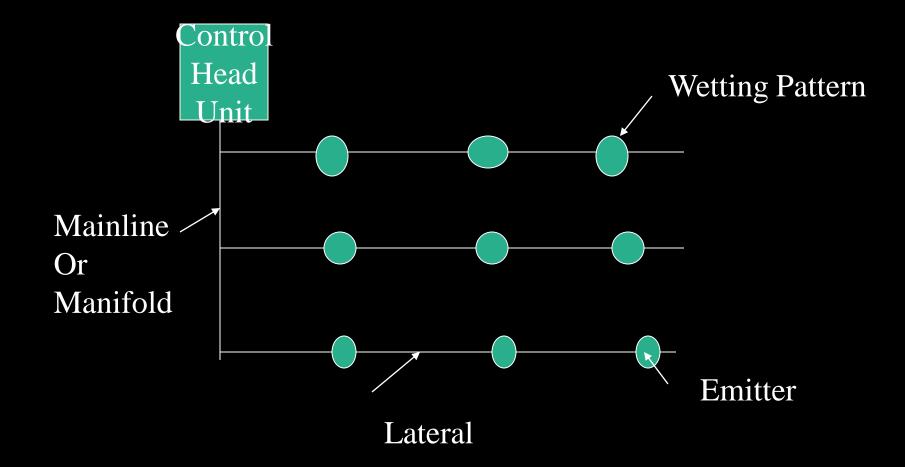
Drip irrigation and landscaping







Components of a Drip Irrigation System

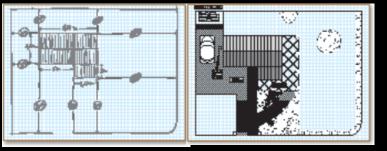


SUB-SURFACE IRRIGATION

- **Applied** in places where natural soil and topographic condition favor water application to the soil under the surface, a practice called sub-surface irrigation. These conditions include:
- a) Impervious layer at 15 cm depth or more
- b) Pervious soil underlying
- c) Uniform topographic condition
- d) Moderate slopes

Simple installation process of a sprinkler system

1 Draw the garden plan



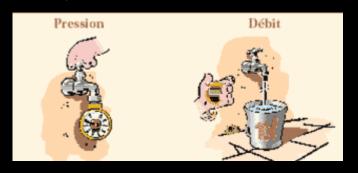
2 choice sprinkler



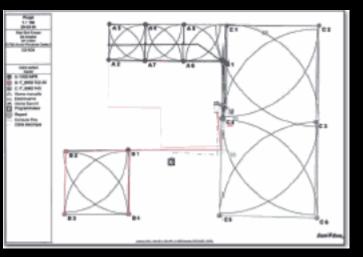
3. indicate on a map the location of sprinklers



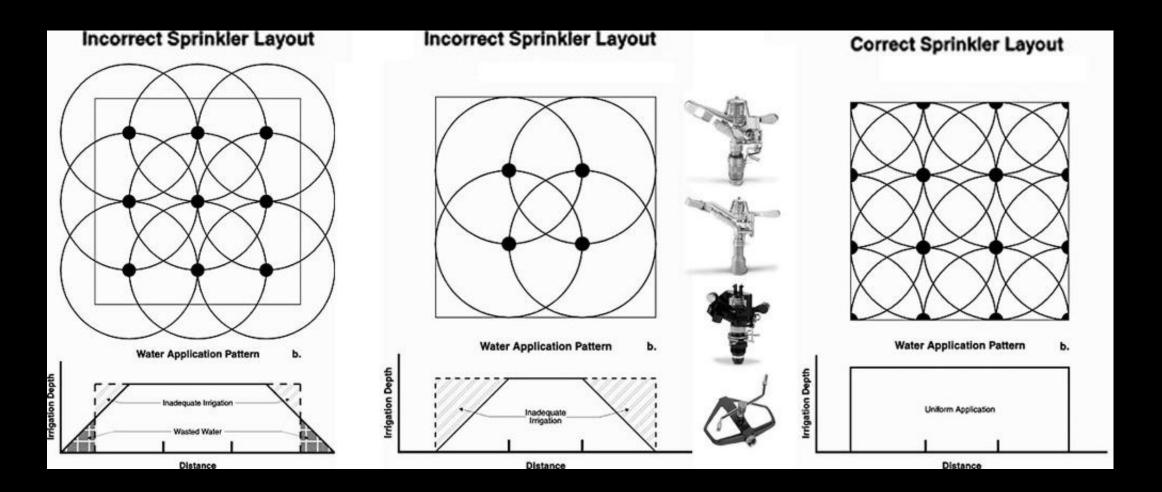
4. establish the pressure and flow of the facility



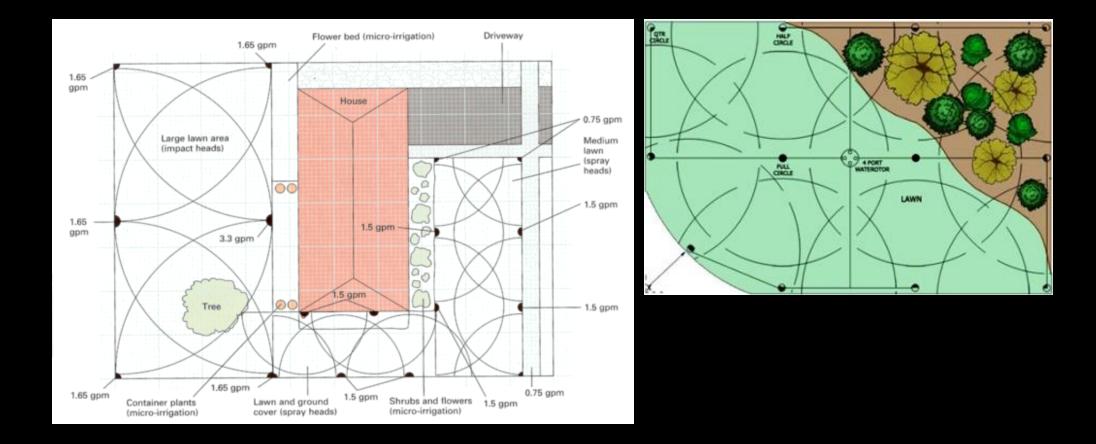
5 final plan of automatic irrigation system



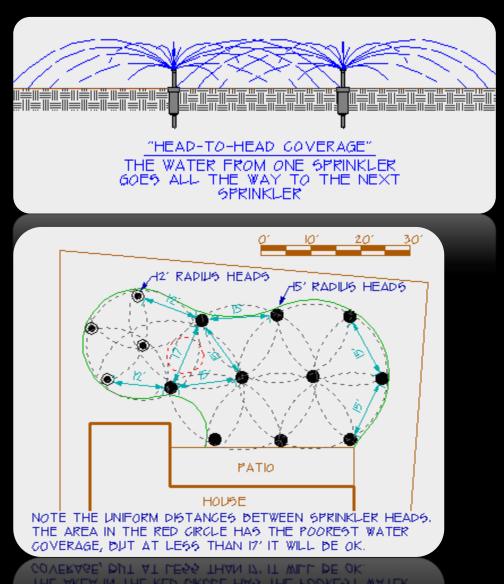
Irrigation plans

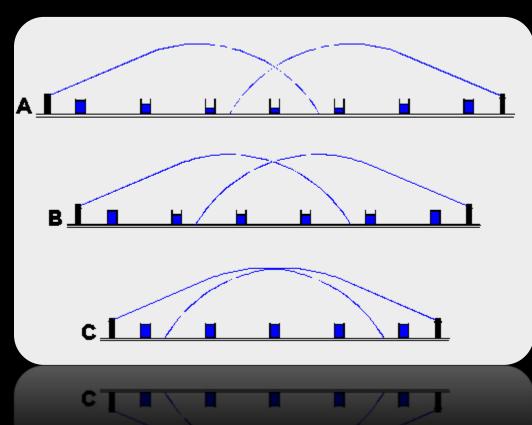


Irrigation plans



Sprinkler types and specifications









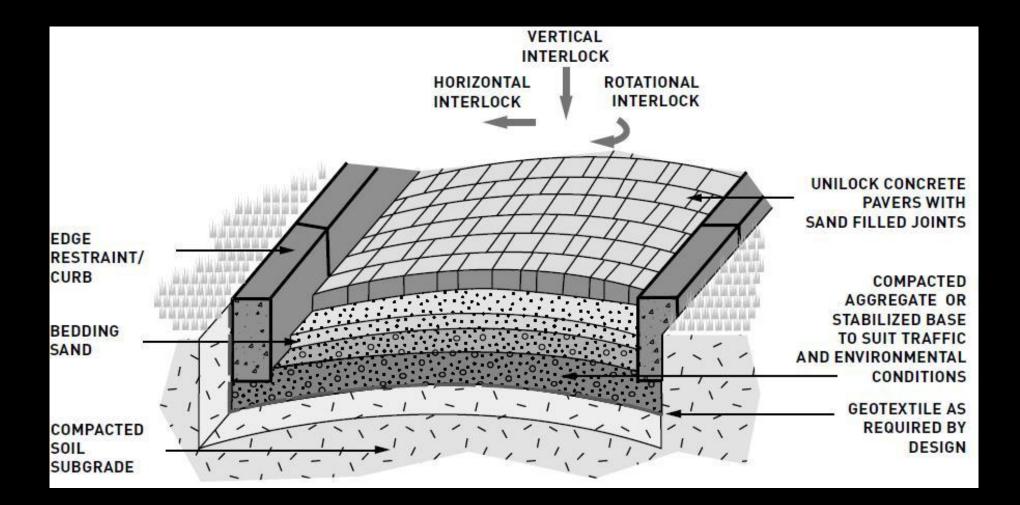


8. CONSTRUCTION DETAILS

MOMANYI M. PETER B02/0981/2014

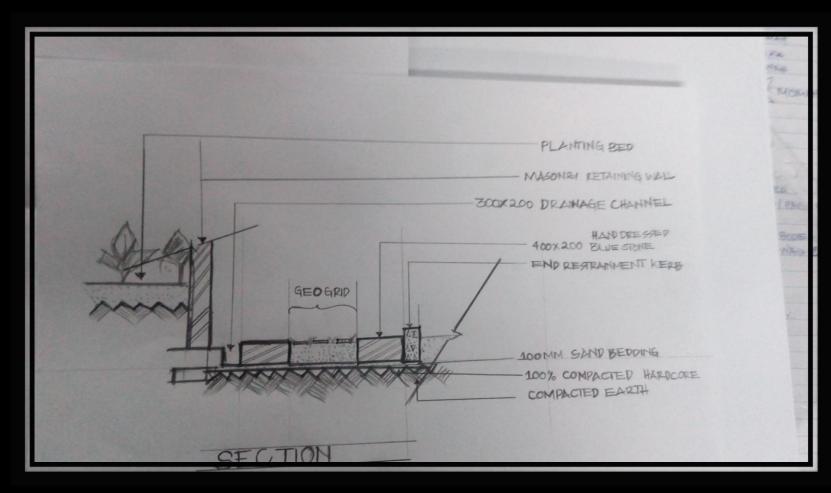
Landscaping construction details

The construction details in landscaping are normally for hardscapes as well as the structural element in the landscape in the landscaping plan.



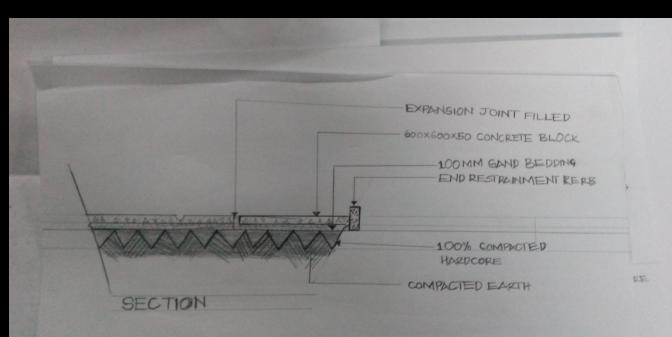
DRIVE WAY

GEO GRID AT THE DRIVEWAY





SOIL FOR PLANTING ...NORMALLY SLIGHTLY LOWER THAN THE PATH TRACED BY WHEELS

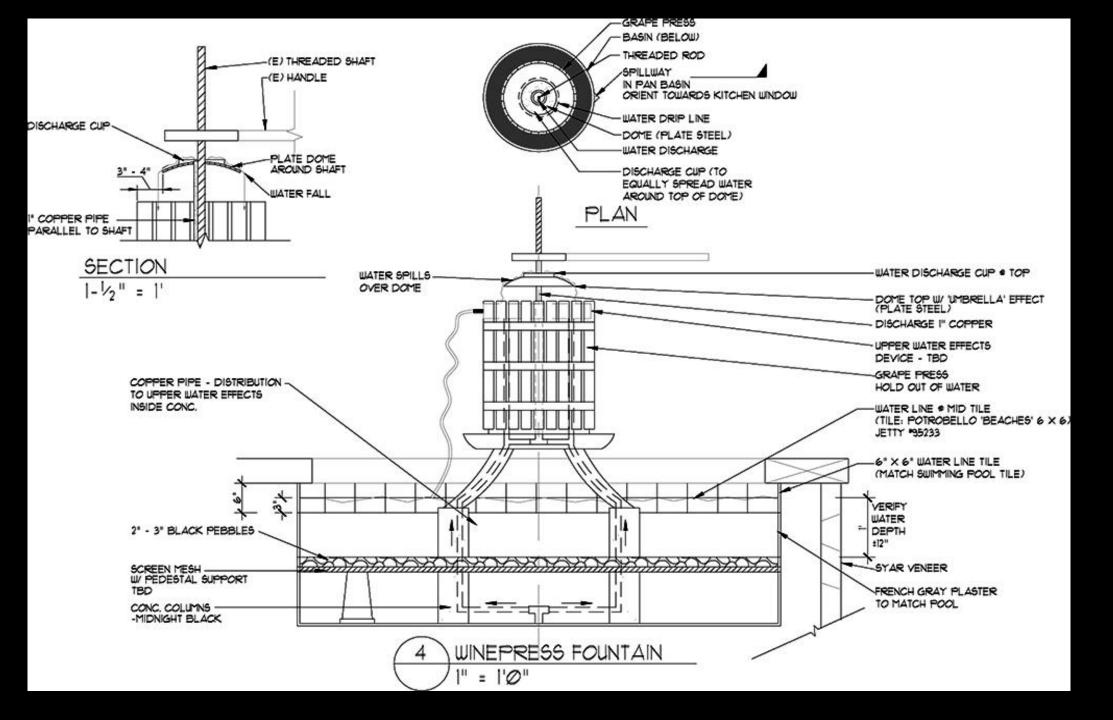


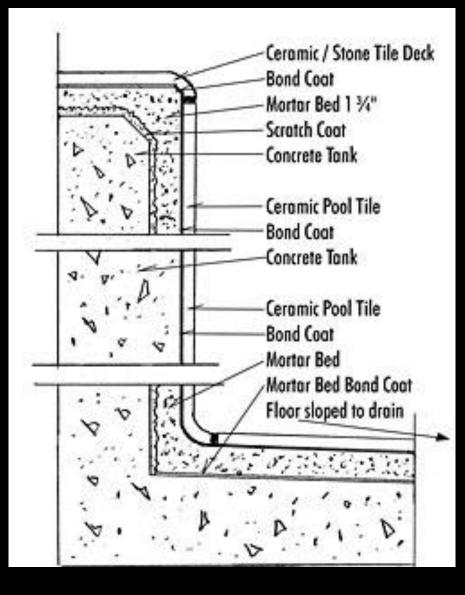
PAVEMENTS

INTEGRATION OF GEO-GRID ON PAVERS TO ALLOW WATER INFILTRATION AS WELL AS REDUCE THE AREA COBVERED BY HARDSCAPES

MAJOR CONSIDERATION DURING CONSTRUCTION OF PAVEMENT IS TO ACHIEVE STABLE GROUND SO THERE IS NO FURTHER SETTLEMENT DURING USE WHICH MAY LEAD TO BREAKING OF PAVERS.

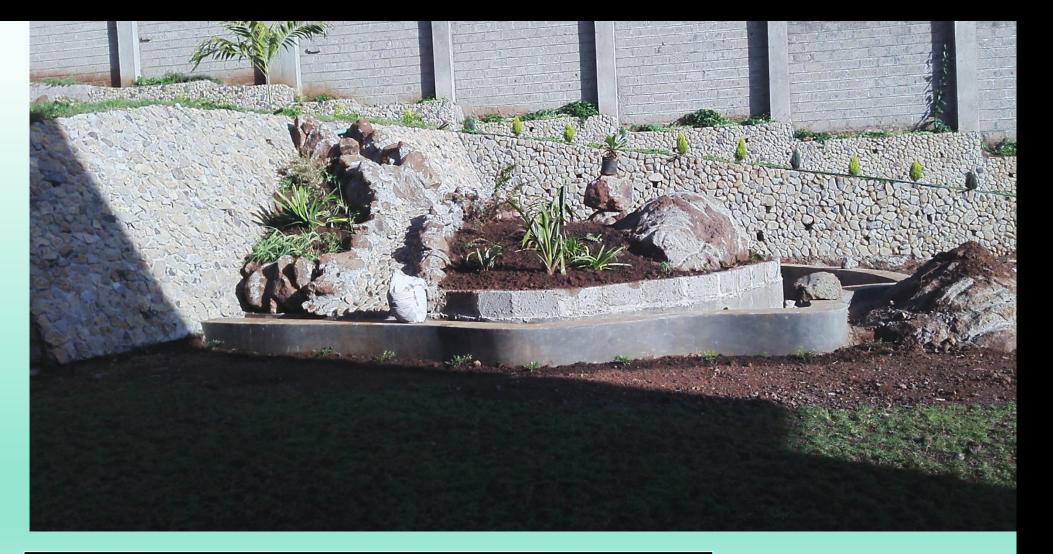






IN GROND WATER FEATURES NEED TO BE WATER TIGHT THEREFORE AVOINDIG WATER SEEPAGE INTO GROUND

SECTION THROUGH A FOUNTAIN WALL



ROCKS AND BOULDERS CAN EXIST NATURALLY OR INTEGRATED INTO SITE DURING LANDSCAPING. THE CONSTRUCTION DETAILS FOR ROCKS KEEP VARYING FROM ONE ROCK TO ANOTHER.....ELEVATIONAL PICTURES ARE NORMALLY USED TO ACHIEVE THESE CONSTRUCTION WORKS

9. PROJECT REPORT

An assessment that takes place during a project

KIPKOGEI VINCENT B02/0980/2014

PROJECT REPORT FORMAT

PROJECT REPORT (NAME OF THE PROJECT)

Vicinity Map

Show:

Project limits
 North Arrow

APPROVAL FROM THE AUTHORITIES

I have reviewed the right of way information contained in this Project Report (New Highway Planting & Highway Planting Restoration) and the Right of Way Data Sheet attached hereto, and find the data to be complete, current, and accurate:

DEPUTY DISTRICT DIRECTOR – RIGHT OF WAY
APPROVAL RECOMMENDED:
PROJECT MANAGER
DISTRICT LANDSCAPE ARCHITECT
DISTRICT MAINTENANCE ENGINEER
DISTRICT VEGETATION MANAGEMENT COMMITTEE CHAIRPERSON APPROVED:

DISTRICT DIRECTOR

DECLARATION BY THE PROJECT ARCHITECT

This Project Report (**NAME OF THE PROJECT**) has been prepared under the direction of the following licensed landscape architect. The licensed landscape architect attests to the technical information contained herein and the data upon which recommendations, conclusions, and decisions are based.

LICENSED LANDSCAPE ARCHITECT



Outline For PROJECT REPORT (NAME OF THE PROJECT)

1.		1.INTRODUCTION				
		A. Dimensions; gross length and area				
		B. Type of proposed work and source of financing				
2.		2.RECOMMENDATION				
3.		3. BACKGROUND				
	A.	A. Dates of previous planting work		D.	project study report	
	B.	B. Project History		E.	Issues	
	C.	C. Existing facility		F.	Commitments e.g. environmental mitigation	
4.		4. NEED and PURPOSE				
	A.	A. Deficiencies	C.	Maintenance		
	B.	B. Water Consumption	D.	Paybacks		
5.		5. PROPOSAL				
	A.	A. Preliminary Design	D.	Nonstandard Design Features		
	B.	B. Safety consideration	E.	Project Cost Estimate		
	9					

C. C. Roadside Management

6. CONSIDERATIONS REQUIRING DISCUSSION

- A. Hazardous Materials
 B. Value Analysis
 C. Resource Conservation
 G. Environmental Compliance
- D. Storm Water Pollution and Prevention

7.OTHER CONSIDERATIONS AS APPROPRIATE

- A. Permits and Other Approvals D. Cooperative Agreements
- B. Consistency With Other Planning
- C. Railroad Involvement

6.

7.

10. PROJECT PERSONNEL

11. LIST OF ATTACHMENTS

A. Preliminary Design Plan

B. Design Concept

C. Environmental Documentation

D. Right-of-Way Data Sheet

E. Aerial Photographs

F. Draft Cooperative Agreement

G . Cost Justification

H. Storm Water Data Report

I. Preliminary Project Cost Estimate

- <u>http://www.surroundslandscaping.com/landscape-site-planning-landscape-design/</u>
- ASLA Glossary: https://www.asla.org/nonmembers/publicrelations/glossary.htm

Grading with Design in Mind: Landscape Site Grading Principles by Bruce G. Sharky Basic elements of landscape architectural design by Norman K. Booth A Visual Dictionary of Architecture by Francis D. K. Ching