Basic Steps to
Theatre Lighting Design

An introductory tutorial for new students of theatre lighting design.

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Read Script and Create Lighting Scene Synopsis

Start by reading the script and highlighting or making notes for every lighting reference put in by the author. At the very least, make a note for each and every scene in the play stating what the lighting seems to be – outdoor, indoor, dungeon, night with campfire, very bright stage, etc. Put these notes in a list, either on paper or in a spreadsheet similar to what's shown below (excerpted from "Alice in Wonderland").

Lighting Scene Synopsis

play:	**Alice In Wonderland**
performance date:	Nov 2 - Nov 6, 2005
lighting design by:	Odyssey Lighting

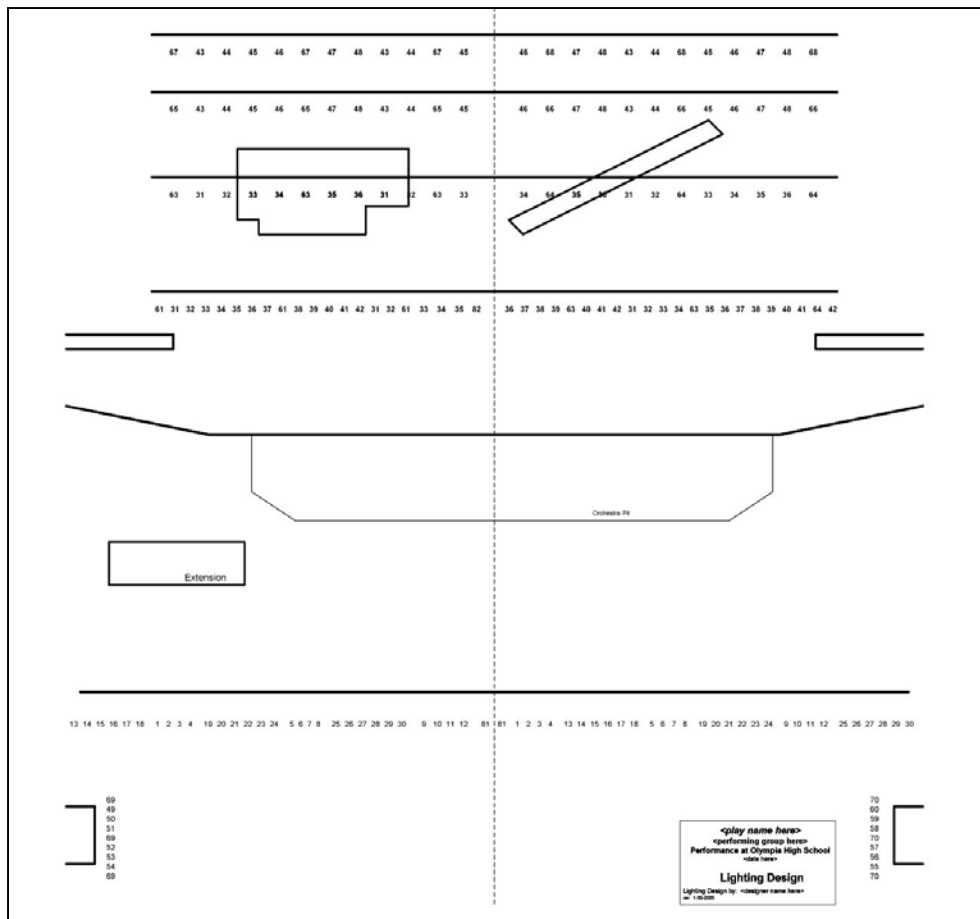| *Act, Scene*	*Scene Name*	*Scenic Description*	*Lighting Notes*	*Scene submaster*
Act I, Scene 1	Alice's Home	Interior by fireplace	amber tones, somewhat dark but warm	
Act I, Scene 2	The Little Door	Interior house	brighter amber tones - loosing warmth	
Act I, Scene 3	The Pool of Tears	Water everywhere	blues, water gobos, effects	Water
Act I, Scene 4	The Caucus Race	Outside, bright beach	Alice in spot at end.	Outside bright
Act I, Scene 5	The Mushroom	Outside, caterpillar on mushroom	breakup gobos for trees	Outside trees
Act I, Scene 6	Duchess' Kitchen	Interior kitchen	brighter and cooler colors	Inside
Act I, Scene 7	Cheshire Cat	Outside, near large tree	Projection for cat smile? Alice in spot at end.	Outside trees
Act I, Scene 8	Mad Tea Party	Outside, at at table under a tree	bright with breakup gobos	Outside trees
Act I, Scene 9	In the Garden	Beautiful garden	same as scene 8	Outside trees
Act I, Scene 10	The Mock Turtle	still outside?	Pinspot SR for seigue to Scene 11	??
Act I, Scene 11	The Trial	Courtroom	Blackout w/lantern effect for cards at end of scene	Inside

Director's Meeting

Next meet with the director and the rest of the artistic staff, such as the set designer, costumer, etc. At this meeting, plan to go page-by-page over the script and make notes of what the director wants each scene to look like and what some of the specific cues might be. Propose ideas back and forth on what a scene or light cue might look like. Update your Lighting Scene Synopsis as needed. Some directors will have a very firm vision on what the lighting is to be, others will be very open to the lighting designer's ideas. Come in prepared for either case. No matter what style the director has, remember that in the end the director's decision is final.

Create the Stage Drawing

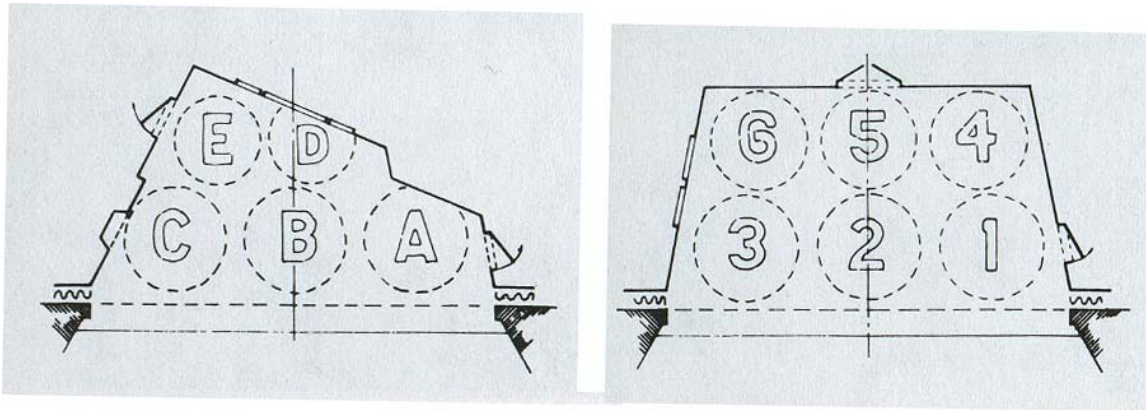At this point, the lighting designer should have a pretty good idea on what each seen will look like. Now it's the designer's job to translate that into a "light plot" – the drawings and instructions that dictate what lighting equipment is to hang where. Start with a listing of available lighting equipment, and a measured drawing of the theatre. Some theatres have drawings or CAD files available, but many do not. If you don't have a measured drawing, visit the theatre space with a tape measure and sketch out the dimensions yourself. Dimensions that are important are stage width, depth, proscenium height, distance from stage front to house electrics, distance from stage front to proscenium, distance from proscenium to each on-stage electric, and heights of each electric. Make a scale drawing of the theatre – a top view.
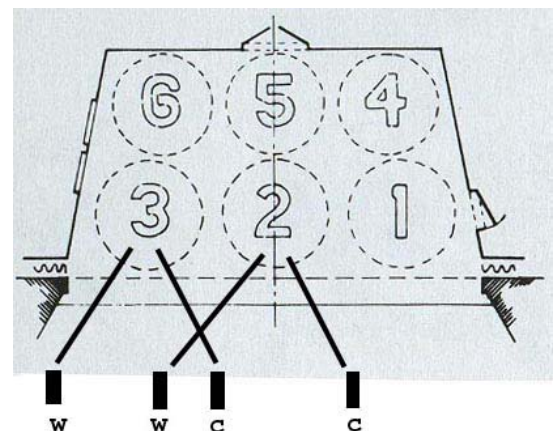
Acting Areas to Light

With the scale drawing, sketch in the key set pieces for reference. This information should have been gathered during the meeting with the artistic staff. If not, make some calls, have meetings, and get the info. Once the sets are marked on the drawing(s), the lighting designer (LD) should now divide up the stage into "acting areas" to light. These are rough zones about 12' in diameter. Label these areas by number, name, or similar. See the diagram examples below.

The Initial Lighting Design

With a scale drawing of the stage and acting areas marked out, you can now start to place the lights on the drawing from the theatre's "hanging positions. The basic method is to have two lights shining into each acting area, about 45degrees left and right of each

acting area center. One of the simplest ways to visualize this in the theatre is to stand in each acting area looking out to the audience. Then raise your arms up and out at 45degree angles up to the lighting pipes. See the sketch to the right for placement of two lights each in two different acting areas.
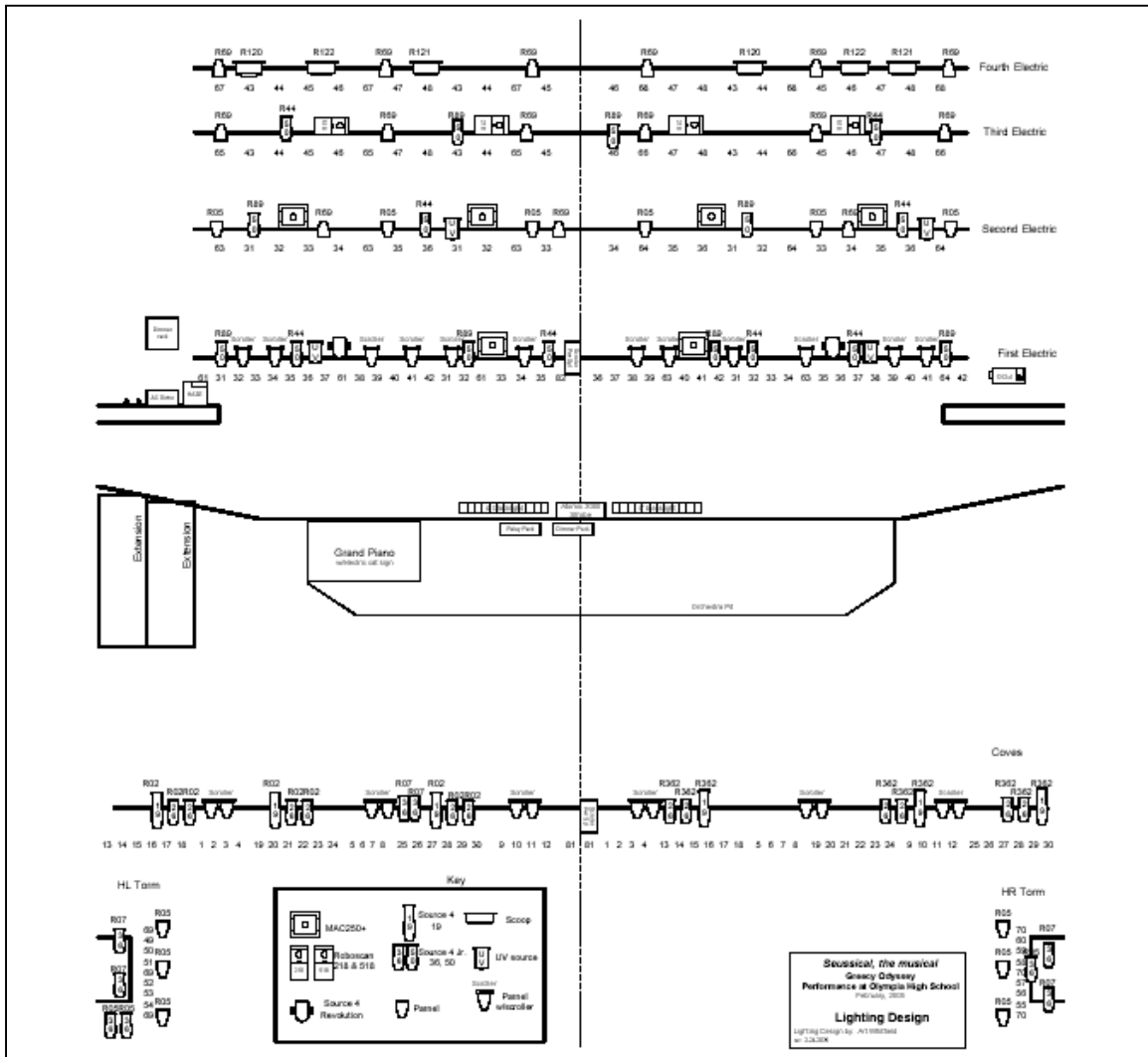

Note how all the lights coming from stage right are labeled "w" and those coming from stage left are labeled "c". W stands for "warm", and C stands for "cool". These are subtle shades of color that will be used for typical daytime lighting. Very common warm colors are amber shades from Rosco (R02, R05), and common cool colors are pale blue or lavender shades from Rosco (R63, R54). For more on choosing colors, see the Rosco color selection guide. There are hundreds of colors, from a wide variety of companies. Rosco is one of the most common and most popular in the USA.

Completing the Light Plot

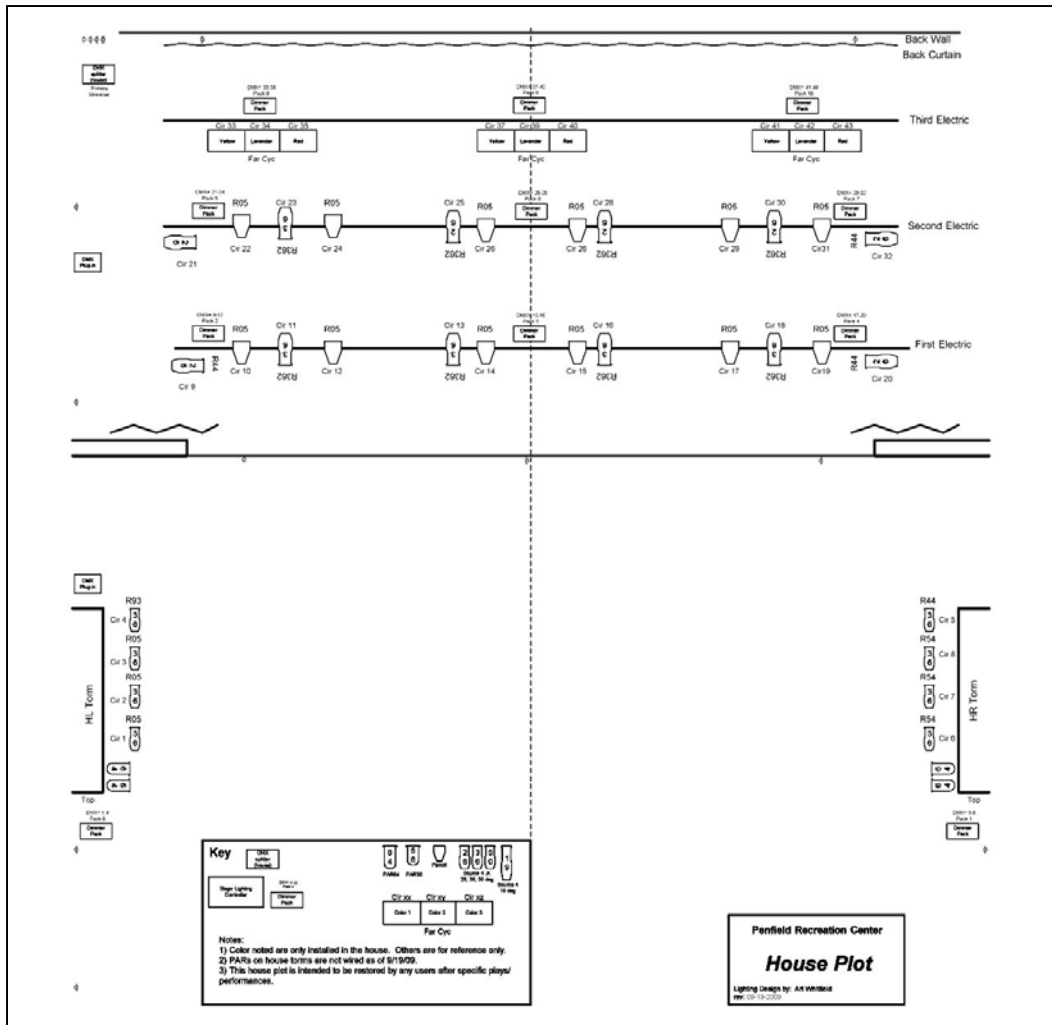Repeat light placement for each acting area on the stage. Add additional lights across the back behind the sets to light up any backdrops, and add other lights for "specials" – specific lighting needs such as dramatic pools of light, fillers for dark areas, or sun/moon beams that need to come streaming in from windows. Also, night and creepy scenes will probably not use the general 2-lights per area setup, so adding dark blue or similar wash lights is important. The diagram below (Seussical the Musical) shows a complete design, with each lighting fixture identified with it's location, circuit number, and gel color.

Another Example

Here is another example of a lighting design in a small facility. This is a community center with a modest number of dimmers and lighting fixtures, but one that has sufficient equipment to properly light the stage, including some basic side lighting, as well as good backlight and a few side lights.

Further Reading

There are specific techniques for all of the above that are mentioned here in a quick and casual format. This document is just to get the reader started in the very, very basics of approaching a lighting design. For more specific information on lighting design, consider the following books:

Scene Design and Stage Lighting
  W. Oren Parker and Harvey K. Smith (pub: Hold, Rinehart, Winston)

Stage Lighting Revealed
  Glen Cunningham (pub: Better Way Books)

A Method of Lighting the Stage
  Stanley McCandless (pub: Theatre Arts Books)

Stage Lighting in the Boondocks
  James Hull Miller (pub: Meriwether Publishing)

A Basic Introduction to Theatre and Entertainment Lighting Equipment
  Art Whitfield (published at: http://www.windworksdesign.com/lighting_whtpapers.html)