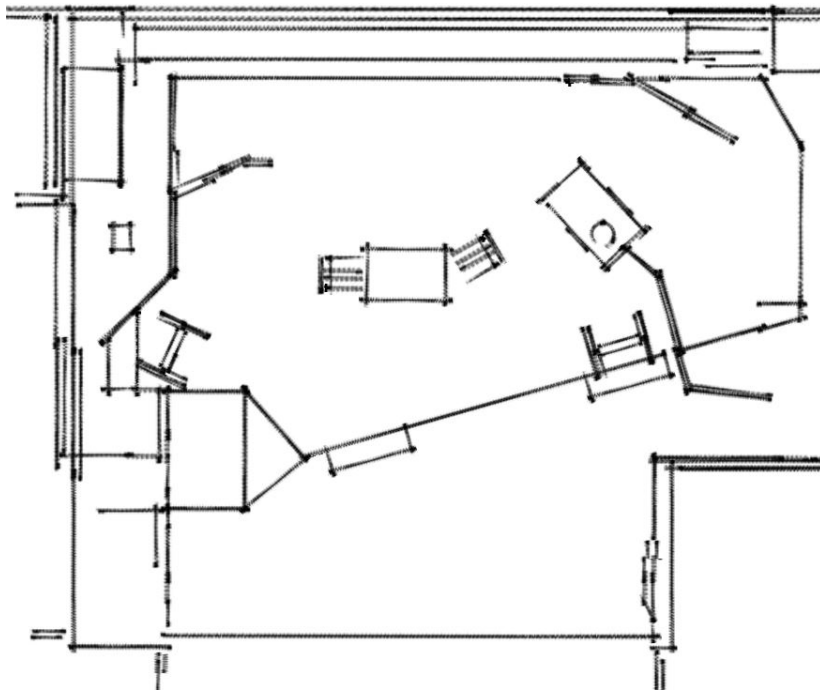


# SET DESIGN – FROM CONCEPT TO WORKING DRAWINGS

A LANGHAM COURT THEATRE  
WORKSHOP

September 17 and September 24

Presented by Bill Adams



# SET DESIGN – FROM CONCEPT TO WORKING DRAWINGS

## INTRODUCTION: WHY THIS WORKSHOP.

### A SET DESIGNER; YOU ARE A PRODUCER OF A PRODUCT; WHO ARE YOUR CUSTOMERS?

- a) THE DIRECTOR
- b) THE ACTORS
- c) THE LIGHTING DESIGNER
- d) THE AUDIENCE
- e) THE THEATRE COMPANY
- f) **THE SET BUILDING CREW**

The primary focus of this workshop is to concentrate on what you need to provide to the set builders so that their task is as well-defined, unambiguous and stress free as you can make it. Often the set building crews available to various theatre companies are made up of enthusiastic volunteers with varying degrees of experience and skills working with limiting time lines and on a limited budget. Professional companies such as Pacific Opera Victoria have the luxury of a huge, well equipped scene shop and professional builders earning union wages. The set designers for those productions often provide astoundingly massive and complex designs, and the drawings and other information they provide to the builders is very detailed, very specific and complete in such a way that the builders don't have to guess what the designer had in mind. All set designers, professional or amateur, should aspire to this. **The builders need a detailed, unambiguous design.** We'll get to what that means in a bit.

But first, let's look at items 'a' thru 'd'.

### YOUR OTHER CUSTOMERS:

#### **THE DIRECTOR – Here are some considerations.**

- 1) The director will have a stylistic vision of the play
  - a) It will usually be specific regarding date or era, (Victorian, 17<sup>th</sup> century, contemporary, etc.)
  - b) It will usually be specific regarding location, (Mansion interior, 18<sup>th</sup> C ship hold, modern kitchen, etc.)
  - c) It may have multiple settings and the director needs major scene changes to accommodate this.

- d) The director **may ignore** all of the above with an idea of doing an intergalactic *Hamlet* or something.

**The set designer MUST follow the director's lead regarding 'vision'.**

- 2) The director will be specific regarding architecture
  - a) Some of these elements may be required in the design
    - i) Entrances and doorways, (which way will the doors swing?)
    - ii) Vertical levels, (risers). These are important for sight lines, acting areas

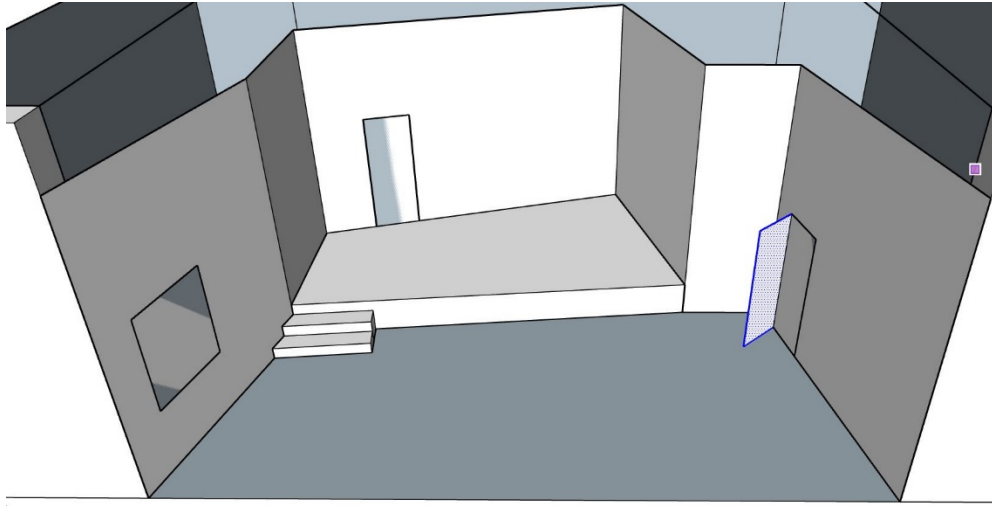


Fig 1

- iii) A backstage cross may be required, (space where the actors can move behind the set without being seen by the audience)
- iv) Specific furniture, (bed, fireplace)
- v) Exterior elements, (tree, fence)

**Or some directors may only want suggestions of these elements to let the actors and the lighting designer set the scene so that the audience can use their collective imagination fill in the details, (*Goodnight, Mr. Tom* set).**

The set designer must incorporate all these director's "needs" right from the primary rough design stage.

- b) Some directors know exactly what they want their set to look like, the designer must carefully listen to the director's vision, view all the visual references (photos, web images, etc.) that the director provides and replicate those to the director's satisfaction. This style of set design still requires considerable skill to take this vision and generate a design that works on the available stage, incorporates all the above elements in clear and detailed drawings, and is buildable given time frame, budget and skill of the builders.
  - c) On the other hand, some directors are happy to give the designers a free hand to come up with their own interpretation; still incorporating the elements while being true to the dynamic thrust of the script. This usually requires a lot of back and forth to work out details which is often done in the company of not only the director but the lighting and costume designers as well.
- 3) **A SET DESIGN SHOULD NEVER BECOME A MONUMENT TO THE DESIGNERS ARTISTIC CREATIVITY. IT SHOULD NEVER UPSTAGE THE ACTORS, THE SCRIPT OR THE DIRECTION.** It can be a really fine and memorable design but the audience shouldn't walk away thinking, "It was a fabulous set but I can't really remember the play."

**AND ALWAYS REMEMBER THIS: THE DIRECTOR ALWAYS HAS THE FINAL SAY.**

## THE ACTORS

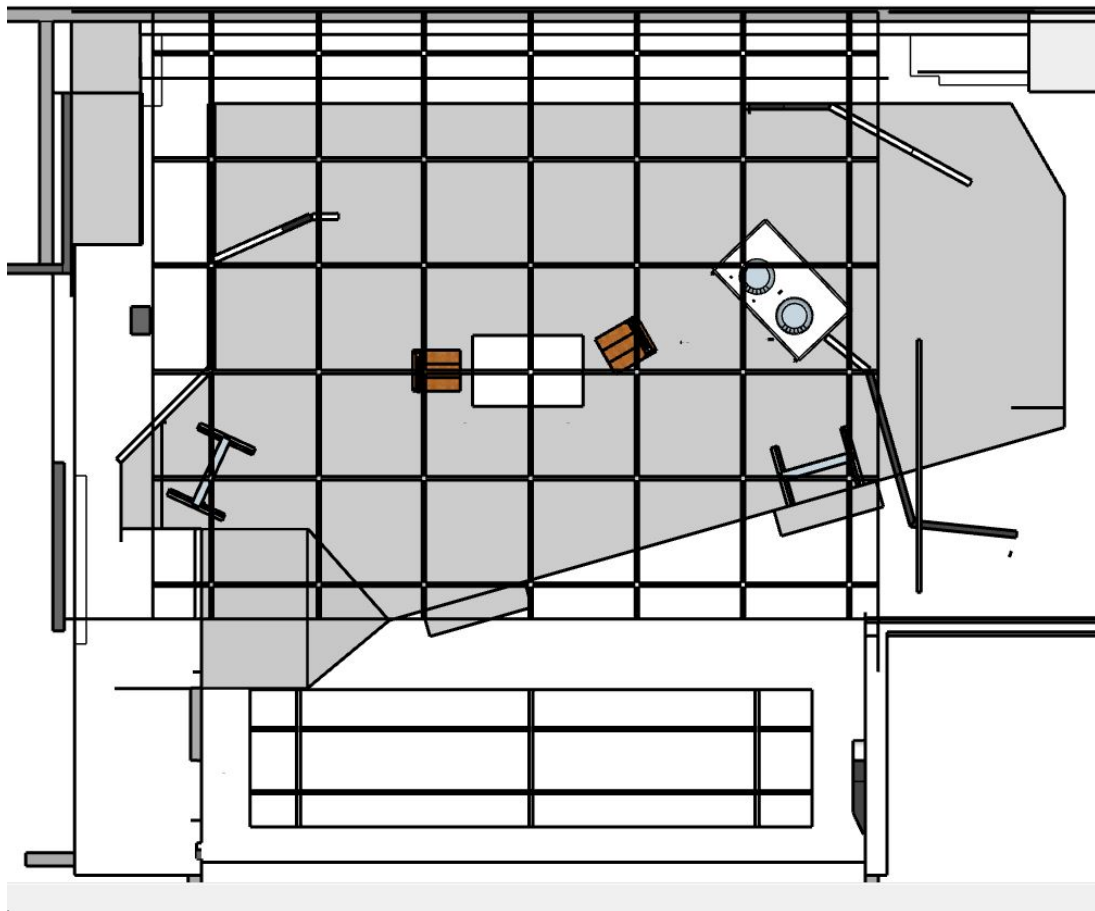
The actors, (God bless 'em) need to be taken care of. They need:

- 1) Safety railings in raised offstage areas where they often navigate in the dark
- 2) Sufficient room in all offstage where they can move, often in a hurry and always quietly
- 3) Adequate contrast at the edges of stairs and levels so that no one will trip or stumble.
- 4) No sharp, protruding things on the back of the set that would catch skin or a costume.
- 5) They often need offstage shielded areas offstage with lights, mirrors and coat hooks for quick costume changes.
- 6) If anything can break or fail to work on stage it will, so nothing flimsy or unsteady or poorly secured should be in the design.
- 7) The actors need room onstage between set elements to move in a natural way.

## THE LIGHTING DESIGNER

Here are some things that the set designer must always keep in mind to keep the LX designer happy:

- 1) The LX designer needs a set plan, and if there are multiple scene changes, a plan for each scene.
  - a) Ideally this would be in a  $\frac{1}{2}'' = 1' 0''$  scale as there are LX grid overlays at this scale available
  - b) The LX designer needs this plan as soon as the design is finalised.



- 2) The LX designer needs a colour swatch reference for the paint colours of walls, floor, etc.
- 3) There must be enough room below the LX grid, (24" min) clear of set elements to hang lights.

- 4) Don't design levels that put the actors' heads closer than 5' to the lights that illuminate them.
- 5) Don't design in overhead things or hanging things that the LX designer can't light around. This creates unwanted multiple shadows that are hard to wash out. Consult the LX designer if something like this is critically necessary, (i.e. a chandelier).
- 6) Avoid large, pure white elements. These are really hard to illuminate effectively and LX designers hate them.
- 7) Make sure the LX crew have adequate space to place their instruments, especially anything on the floor or in the wings.
- 8) Have the LX designer vet your design before it is finalised. They may require some crucial changes.

## THE AUDIENCE

- 1) The audience obviously needs to see and hear the actors
  - a) Check all the **sight lines** from the end seats of the front row so that all the critical things can be seen, (and offstage things are not seen). This should be done on paper, (or computer) before the design is finalised. *"Make all your mistakes on paper"*. It's too frustrating and time and money consuming to correct these oversights during the build.
    - i) All sight lines to offstage areas should be checked; through doors, windows, around masking flats. No audience should see offstage movement of actors or stage crew.
    - ii) If the audience members in the front rows have to look up to the set and the actors, avoid putting large furniture elements downstage that will mask the sight lines to the upstage areas.
  - b) An interior box set with parallel walls; perpendicular to the front of the stage is a **sound trap** with a lot of the dialogue getting lost as it bounces back and forth between side walls. When the sound does make it to the audience, the repeated echoes make it mushy and hard to discern. A set with walls angled out to the audience, (*Fig. 1*) will broadcast the sound to the audience.

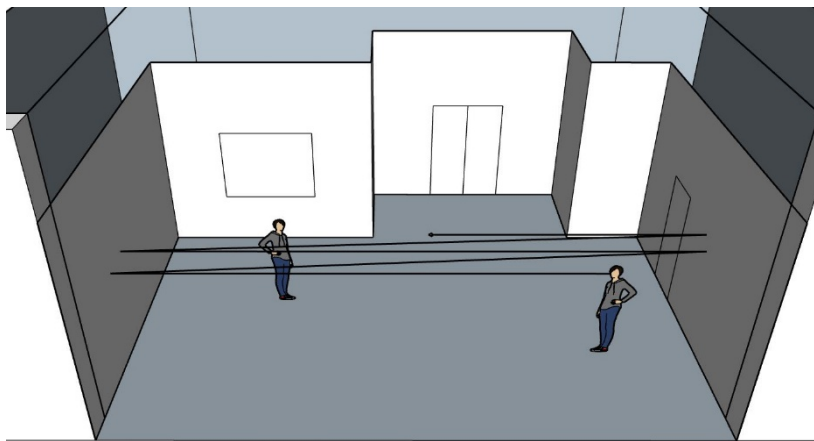


Fig. 2

- c) Major overhead set elements may also create a sound trap so that the dialogue is trapped upstage and is lost. (*Fig. 3*)

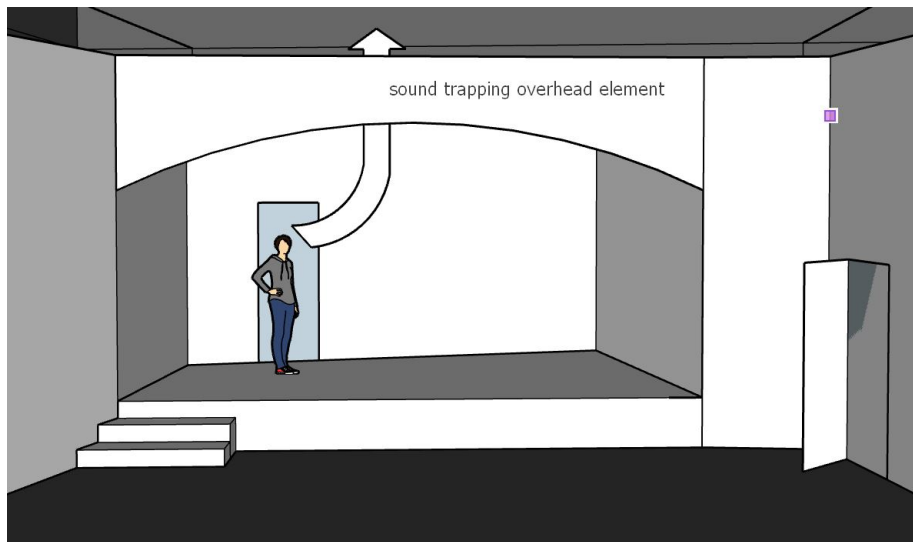


Fig. 3

## THE THEATRE COMPANY

- a) **BUDGET.** Know how much is budgeted for set construction – all the building material and paint so that what you design can be paid for. Expensive building materials and finishes can be tempting but are often out of the question.
  - i) Using paint colour swatches is handy to show the colour scheme desired. But buying a gallon of new paint for each colour is very expensive, (\$35 - \$50). Most theatre companies have a good collection of paint colours, so consider having the head painter mix the desired colour from available stock. A reasonable match is usually possible.
- b) **SET DESIGN STANDARDS OF THE THEATRE COMPANY.** Make sure your design meets or exceeds the quality of the sets that the theatre company has come to be known for.

## THE SET BUILDING CREW

This is the main thrust of this workshop. This focuses on what the set designer needs to produce and provide to the **HEAD SCENIC CARPENTER** and to the company of builders. As this workshop is mostly for non-professional companies, it means that the builders are volunteers. That means that they are only doing the work because it is an enjoyable hobby. An **incomplete or inadequate set design** has the potential of causing uncertainty, unnecessary time delay, frustrating changes and re-builds, arguments, stress and frustration. Too much frustration will cause the workers to drop their tools and walk out. **It has happened!** The volunteer building, (and painting) crew is an underappreciated but critical element to the successful running of a theatre. A couple of frustrating shows for the builders will reduce or eliminate the number of available and experienced builders leaving the head carpenter – and the production – **and** the theatre company in a real bind. It is chronically difficult to lure new builders with reasonable skills sets into the fold. It **has to be a positive experience** for them or they won't stay.

The head scenic carpenter must demonstrate good management and delegation skills, but this is only possible if he had a good set of plans to work from. Inadequate or poorly conceived plans can set the whole process into a tail spin.

# SO LET'S GET STARTED ON HOW TO MAKE A GOOD SET OF PLANS

## TAKING YOUR GREAT SET DESIGN AND PUTTING IT ON PAPER

1. CONSULTING WITH THE DIRECTOR, LIGHTING DESIGNER, STAGE MANAGER AND HEAD CARPENTER
  - a. This is the back-and-forth stage with rough concept sketches, making sure all the essential elements are included.
  - b. Often, when your collaborators see what you have come up with in two dimensions, critical things spring to mind. It's amazing what people will overlook or not consider when they are imagining the play on stage. Having visual references often brings things to mind.
2. MAQUETTES OR SET MODELS.
  - a. Many directors have a hard time mentally transforming a two dimension drawing into a three dimension set. They much prefer to see your ideas in the form of a model. This entails a lot more work than drawing but in the end, it can save a lot of grief.
  - b. Set models are usually done in 1:24 ( $1/2'' = 1'$ ) scale. They should be made in a scaled mock-up of the actual stage, (Langham has several available). This allows the director and lighting designer to see the set from the audience's perspective with all the inherent sight line issues. Just seeing a model of the set free-standing without the constraints of the stage house and proscenium can lead to unexpected problems.
  - c. Be prepared to remake some or all of your model if you choose to use modelling as your rendering medium.
  - d. ***YOUR MODEL CANNOT BE YOUR SOLE SOURCE OF BUILDING INFORMATION FOR THE SET BUILDING CREW. The model does not have the accuracy and detail that is necessary. YOU NEED TO PROVIDE ACCURATE DRAWINGS WITH MEASUREMENTS.***
3. ***"THAT'S WHAT I TOLD YOU BUT NOT WHAT I MEANT"***
  - a. I don't know how many times I've heard that from a director or from a set designer.
  - b. This initial back-and-forth stage is crucial and it's important to get everything right before you go to the final drawing stage.
4. **PRACTICUM 1.** See attached sheets.
  - a. This is to demonstrate the importance of clarity of communication.
5. **YOUR DESIGN ALWAYS HAS TO BE DRAWN TO THE DIMENSIONS, (and limitations) OF THE STAGE HOUSE**
  - a. Get a copy of the stage plan, (and side elevation if available) of the stage your set will built on. See references in the addenda.
    - i. This is easy if you are working digitally. Digital files will be available from the theatre company. (See references in the addenda)
    - ii. The company could also have 1:24 ( $1/2'' = 1'$ ) scale sheets of the stage plan available for you. Langham has these.

- b. Be aware of awkward limitations of the stage, (low proscenium, structural posts, low offstage areas, solid downstage walls, etc.). These could easily impinge on your design. This information should be on the stage plans given to you.
  - c. **ALWAYS HAVE A WALK AROUND ON THE ACTUAL STAGE TO ASSESS THE ACTUAL LIMITATIONS.** If the theatre has a production manager or head carpenter, having this person with you is useful as he/she can point out things that need to be considered. A good time to do this is right after a set strike from a previous show. This is one of the few times the stage is actually bare.
6. **YOUR SET MAY NEED TO BE MADE OFF-SITE AND LOADED INTO THE THEATRE SHORTLY BEFORE THE SHOW OPENS. This introduces a whole other set of challenges.**
- a. If it is only going to be performed on **one stage**, this makes it easier.
  - b. Your set will need to be designed in strong, moveable pieces that can be loaded out of your construction and painting area, onto a truck and then loaded into the theatre and assembled there – usually within a limited amount of time because:
    - i. The lighting designer has to hang and focus the lights which always takes more than the allotted time.
    - ii. If it's a musical, the orchestra has to have a '**sitzprobe**', (a rehearsal onstage with the actors sitting and singing, which usually takes a full evening.
    - iii. Then one or two dress rehearsals before the audience arrives. All this stage time costs so the reconstruction of the set on stage has to be clearly thought out in advance, an adequate crew available\*, and all the necessary pieces and fasteners and tools have been brought and are at hand.
    - iv. \* sometimes you'll load into a 'union house', (i.e. The Mac.) where you're obliged to have union stage crew build your set, getting paid union rates. Together with the head carpenter, you need to ensure all the component pieces are structurally sound and clearly labelled.
  - c. Remember that in most theatres you are not allowed to attach anything to the stage floor, (no screws), so your set may need to be designed with wall supporting jacks and stage weights to keep everything standing. Your design must include the placement of the jacks so that the limitation they place on movement backstage is not a surprise.
  - d. Be aware to limitations to load-in, load out access in any theatre. Many theatres are poorly configured to bring in large pieces, so a mock-up of the whole load-in route may be needed to ensure things will actually fit.
  - e. If the theatre has a fly gallery and your design includes elements that fly in and out, you need to consult the theatre's production manager or some pro theatre carpenter as to how to do this. It's very specific as to how these things are rigged and hung and if it's not done correctly, the theatre won't allow them to be hung.
  - f. **If the show is going to be performed on more than one stage**, (Gilbert and Sullivan productions play at the Charlie White Theatre and the Dave Dunnet Theatre; Four Seasons productions are at the Isabelle Reader Theatre and the Dave Dunnet Theatre) then you have to design your set for two radically different spaces.
    - i. The Charlie White theatre has a 'letter box' proscenium, (44' wide and 14' high). There are only 8 rows of seats but they wrap around the stage thrust so that for



anything designed upstage on the set it is crucial that you check the sight lines from the outer seats. Often many seats on the ends of the rows cannot be sold due to sight line constraints which limits the number of 'bums in seats' for the run.

At the Charlie White, their large thrust is usually taken out to provide room for the orchestra for Gilbert and Sullivan productions. When they built the theatre they refused to make provisions for any sort of orchestra pit so the orchestra creates both a visual and sound barrier between the audience and the performers. This is far from ideal.

- ii. The Dave Dunnet Theatre and The McPherson both have a conventional proscenium theatre design with an orchestra pit which puts the musicians down and out of sight. The Mac is only 32' wide (12' less than Charlie White) but the prosc is 10 higher. The Dave Dunnnett theatre has a similar configuration to the Mac. The set designer has a considerable challenge to make his/her set work if it has to move from Charlie White to either of these stages.

**g. GO TO PRACTICUM 2.**

**So now you have your preliminary set plan and/or model, laid out within the exact dimensions of the stage(s) where the play will be performed.**

**See Fig 4.**

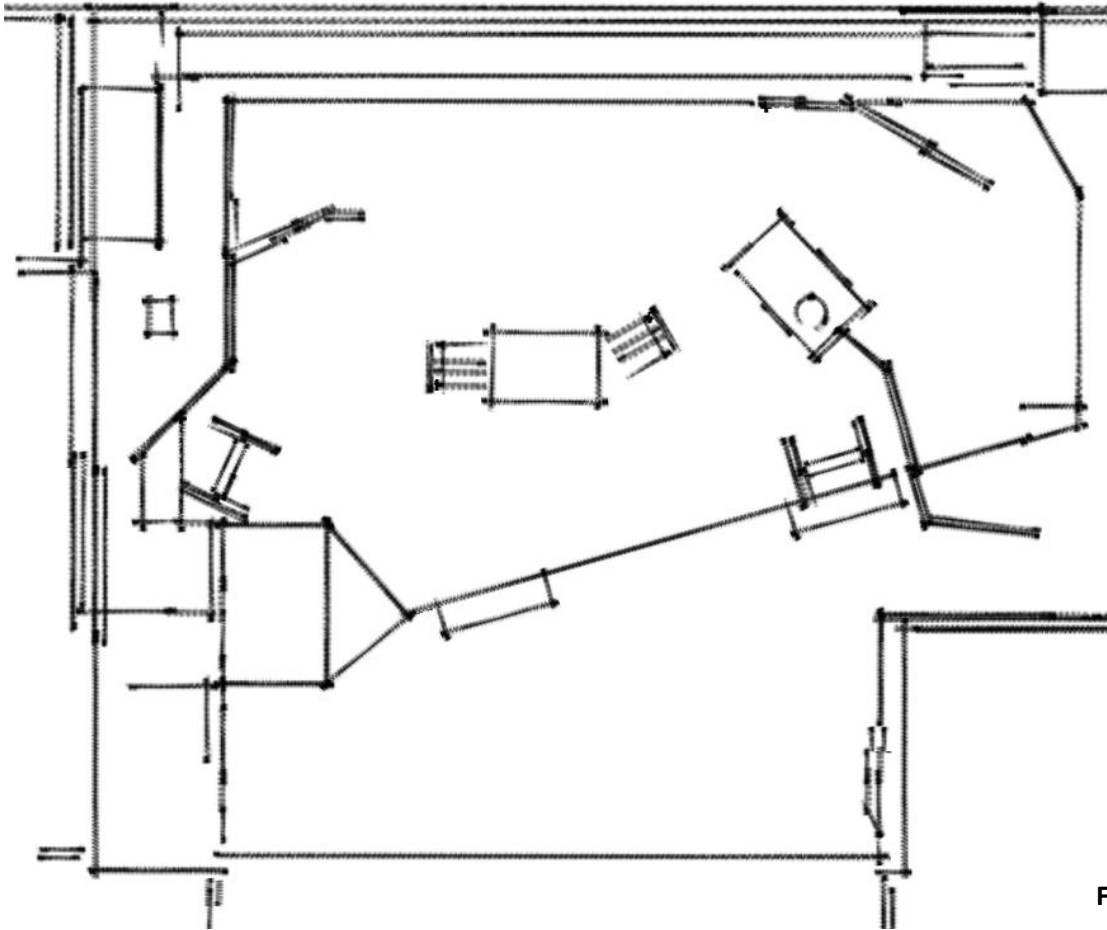


Fig 4

If you don't have a model at this stage, it would be useful to the director to have a front perspective view of the set so that the director can see what it'll look like from the audience.

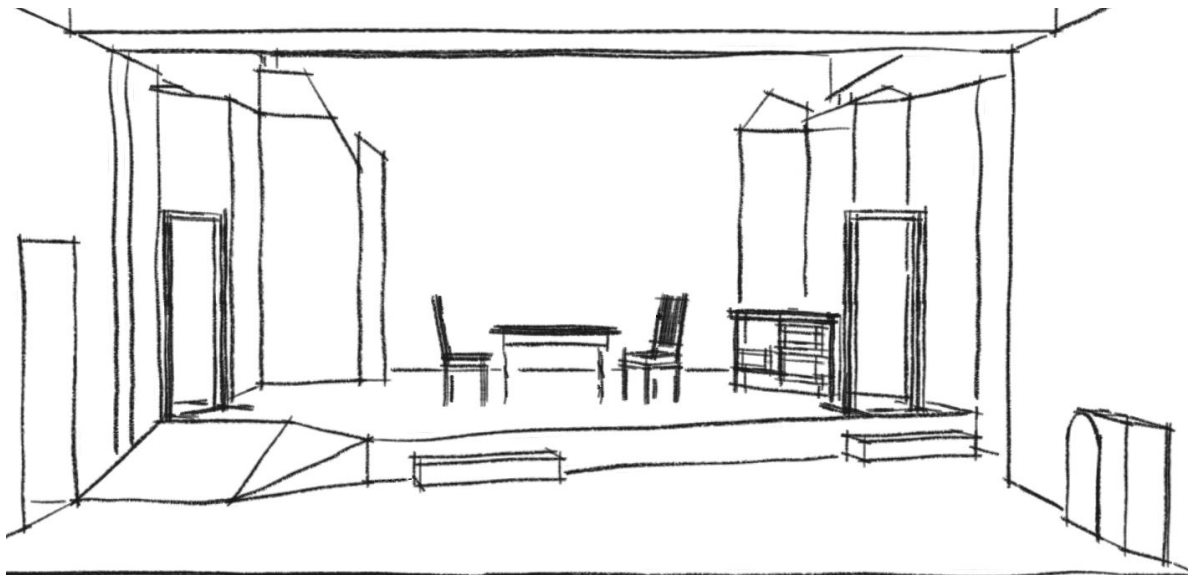


Fig 5

At this stage the director absolutely needs to understand what your plan entails; all the essential elements, entrances, levels, wall treatment, etc. The director needs to sign off on your plan before you start working on detailed drawings with dimensions. This next step entails a lot of work if done with a computer graphics program – and a lot more work if done on paper by hand. Changes to your final drawings are time consuming enough on a computer, but they are a real pain if you have to make major changes or redraw the whole thing by hand. The director needs to understand that changes made to the plan after he/she has signed off on your preliminary plan will create unnecessary extra work and aggravation.

**BUT THAT’S NOTHING COMPARED TO THE AGGRAVATION AND EXTRA WORK FOR THE SET BUILDERS IF THE DIRECTOR – OR THE SET DESIGNER – MAKE ANY CHANGES AFTER THE CONSTRUCTION HAS COMMENCED.**

**AT ALL COST, AVOID THE TEMPTATION TO MAKE THE BUILDERS TEAR SOMETHING DOWN AND REBUILD IT A DIFFERENT WAY BECAUSE YOU DON’T LIKE THE WAY IT LOOKS IN THE FLESH. DON’T BE THE ONE WHO SAYS, “THAT’S WHAT I SAID BUT NOT WHAT I MEANT”.**

## SO WHAT’S NEXT?

1. WHERE AT ALL POSSIBLE, DESIGN YOUR ARCHITECTURAL ELEMENTS IN 4 ft. INCREMENTS. THIS MAKES MOST EFFICIENT USE OF AVAILABLE MATERIALS AND MAKES RE-USE POSSIBLE. See Fig. 10
2. Figure out what drawings you will need to produce. Make a list. Show this list to the head scenic carpenter to make sure you will provide him with all the information he needs.

1	LIST OF DRAWINGS FOR LES BELLES SOEURS.				
2					
3	FRONT PERSP				
4	PERSP NO STAGE WALLS				
5	PLAN				
6	RISER PLAN				
7	WALL PLAN				
8	WALL ELEVS				
9	VALENCE ELEV				
10	LOWER K CABINET ISO				
11	LOWER K CABINET FR ELEV				
12	LOWER K CAB SIDE ELEV				
13	LOWER CAB DRAWER AND DOOR DETAIL				
14	UPPER CAB ISO				
15	UP CAB FR ELEV				
16	UP CAB SIDE ELEV				
17	UP CAB DOOR DETAIL				
18	WINDOW DETAIL				

Fig 6

This is a fairly exhaustive list and some of the drawings were just small detail drawings but it was important because it contains information that is crucial for the builders to work from. With a carefully thought out list, ideally in consultation with the head scenic carpenter, nothing should be missed.

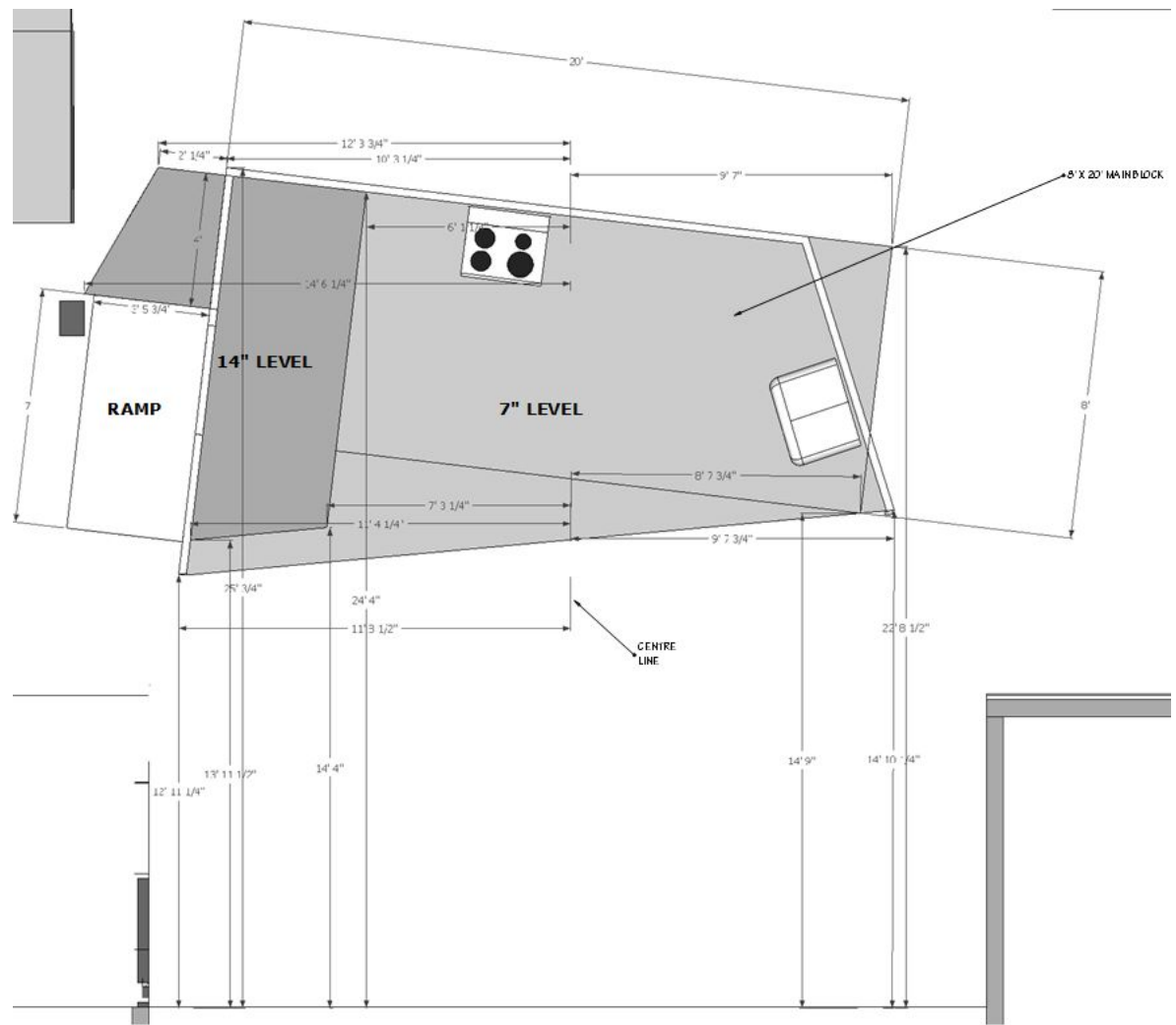
3. Now you start working your way through the list.
  - a. With the plan, (top) view drawings, (numbers 5, 6, 7 above), the stage walls and apron should be included to place your set on the stage. It's most convenient to work in a 1:24 ( $1/2'' = 1'$ ) scale.
  - b. If you're not using a computer graphics program, use a scale rule to get the exact measurements at that scale.



Fig 7 Scale rule

The builders will need dimensional information which is as exact as you can make it.

- c. **PLACING CRITICAL CORNERS OF RISERS AND WALLS ON THE STAGE FLOOR.** To do this, I recommend using the centre line of the stage, (front to back) and the front apron as base lines. Every corner can be exactly placed based on its distance from the centre line, (right or left) and the distance from the apron.



**Fig 8**

- d. If the builders can exactly position these crucial elements on the stage floor, it eliminates guesswork and potential problems down the line.
  - i. They can mark the positions on the stage floor, then cross reference the linear dimensions of the risers and/or walls to check and fine tune those positions.
  - ii. This is like laying out the foundation of a house. It needs to be accurate otherwise everything that is built above it will be out.
- e. Now that you have provided the builders with a clear plan and accurate measurements for the placement of any architecture on the stage floor, you should provide a plan view with all the wall sections labelled. See Fig 9, next page.

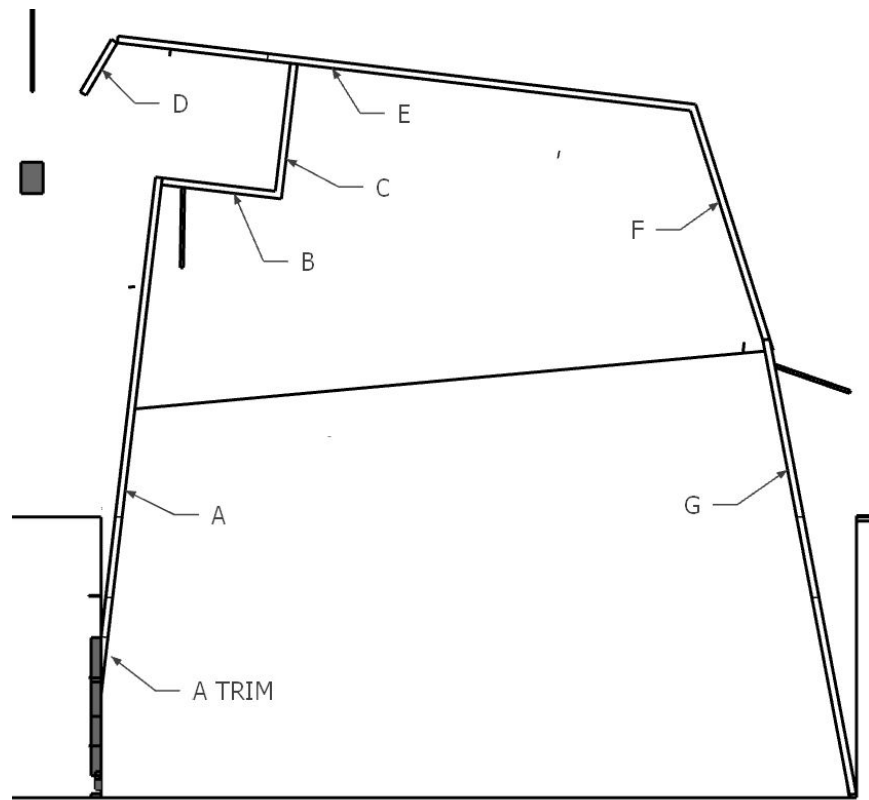


Fig 9 Wall plan

- f. These labels will correspond to elevation drawings of each wall section showing the dimensions and any doors or windows incorporated in the walls.
- g. The next drawing(s) should then show the elevation views of each wall section.

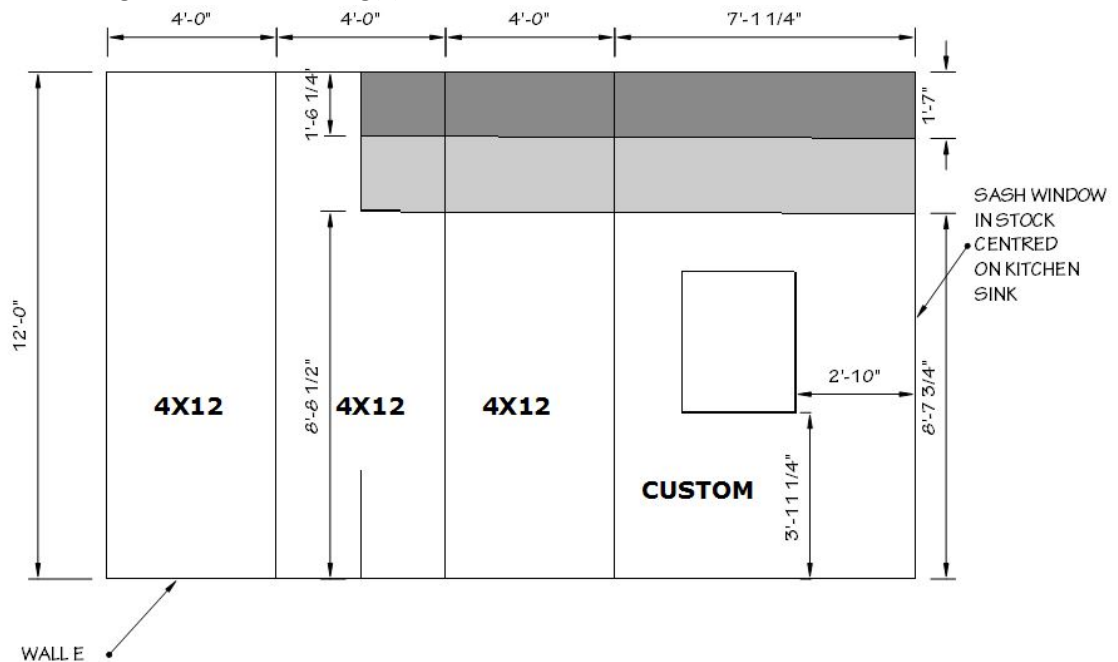


Fig 10. Wall elevation detail

- h. Notice that standard, available 4' X 12' flats have been used where possible
- i. The shaded areas in Fig 10 relate to the valence, (light grey) and black painted areas on this wall.

- j. Sometimes specific detail is required in places where junctions are not straightforward.

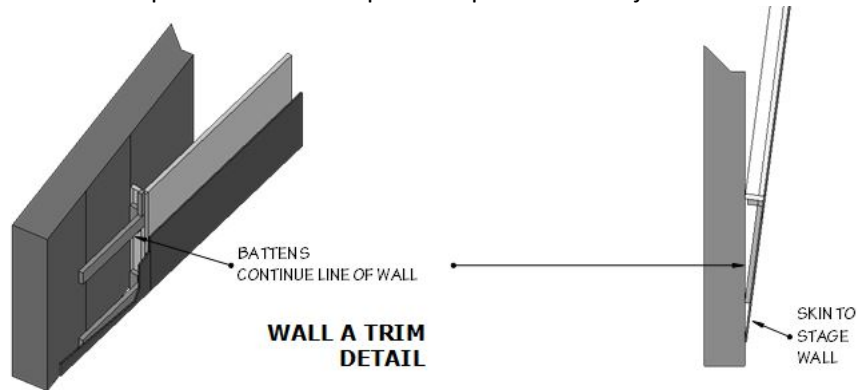


Fig 11

- k. When all the detail for the walls is laid out, detailed information should be provided regarding door and window trim, baseboards, crown moulding etc.

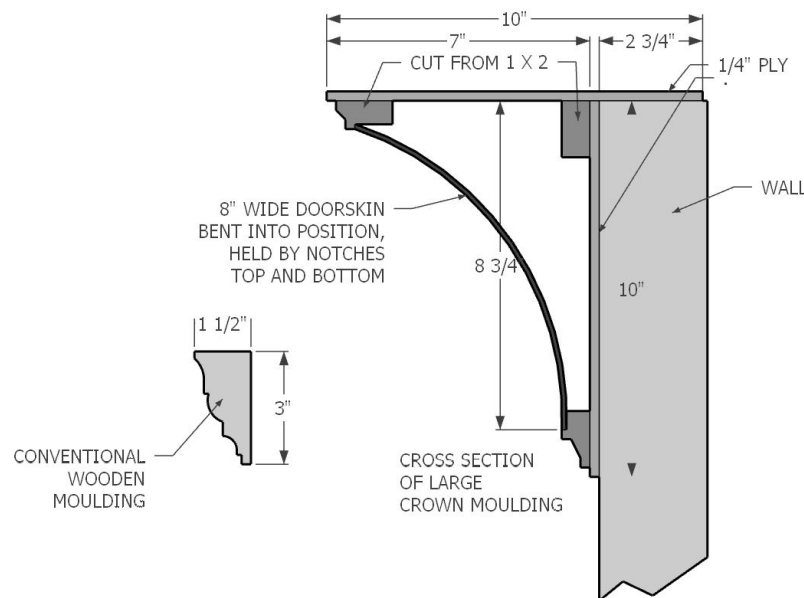


Fig 12

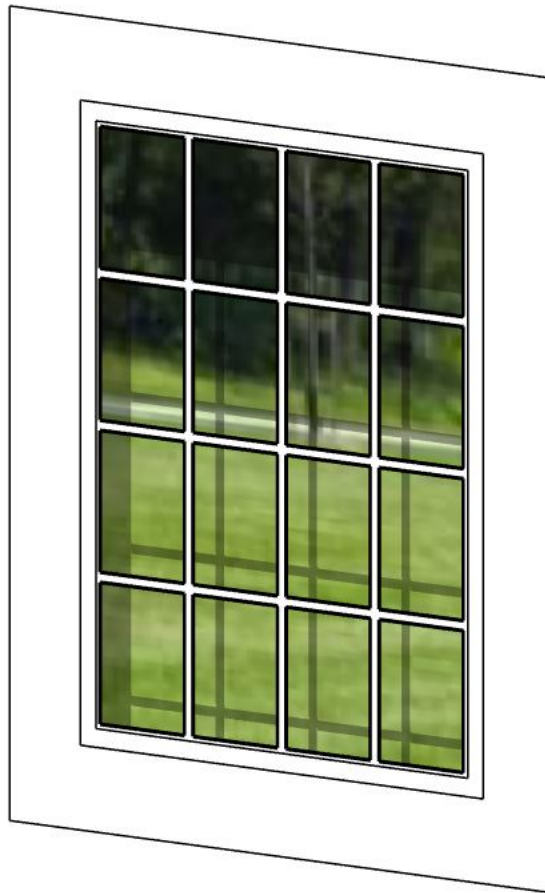
- l. If you don't know how the large crown moulding would actually be built, at the very least a cross section drawing of the outside edges is needed so that the head builder could figure out its construction.
- m. If you have illustrations or photographs of the type of door and window trim you want, (usually available off the web), these could suffice in lieu of detailed drawings. That works for other specialized detail as well, but providing critical dimensions is necessary. However, it's best in every case to have detailed drawings.
4. **EXTERIOR SCENIC ELEMENTS: TREES, HEDGES, FLOWER BEDS, ETC.**
- a. These things need to be drawn into the plan view drawings for precise placement but obviously there will be some organic sculpting depending on the material used. A drawing depicting organic elements as accurately as possible to your desired look is important. What a carpenter might create as a tree might be a completely different animal to what you had in mind. Be accurate so that no assumptions need to be made.

- b. When an exterior scene needs to be 'sculpted' with sloped contours and free-form elements, it's best if the designer can be on hand to work with the carpenters.

5. **PAINTED SCENIC BACKDROPS.**

**If the designer is also going to be the painter, this makes it easier. If another artistic painter will be doing the job, an accurate scale illustration is necessary so that you get exactly what you want.**

- a. Make sure all the sight lines are considered so that the backdrop is visible to every seat in the house.
- b. Make sure that the lighting designer can get the necessary lighting onto the scene. Often different times of the day need to be shown which requires a change in the lighting. Cyc lights, (overhead) and footers, (on the floor) are commonly used. They need to be placed some distance away from the backdrop so that the image doesn't have light hot spots from lights that are placed too close.
- c. The further a window is away from the backdrop, the less chance there will be annoying shadows on the backdrop from the interior illumination.



Here you see the shadows from the window mullions cast on the scenic backdrop. The more room you can leave between the window and the scene, the easier it is to eliminate the shadows. If there is to be a night time scene, you might consider putting black scrim on the upstage face of the window. The scene behind can be seen when it's illuminated but goes to black when it's not lit. Or you can have curtains drawn at night.

Fig 13

**CUSTOM**

**FURNITURE. Sometimes furnishing needs to be manufactured for the play**

**MADE**



because it is either too specific, (kitchen cabinets), unique to the design of the play, (specialized seating or tables, etc.) or not available to rent or borrow. An example of this is the Aga stove needed in *Goodnight Mr. Tom*.



We have to make a stove like this for the play. It's out of the question to acquire a real one and the one in the play has to look old and used. It also needs to be reversible so that the back side can be used for other purposes.

Fig. 14

### GO TO PRACTICUM 3

**DON'T SKIMP ON THE DETAILS IN YOUR DRAWINGS. IF YOU ASSUME THAT THE BUILDERS CAN FIGURE OUT WHAT YOU WANT FROM AN INADEQUATE DRAWING, NOT ONLY WILL MISTAKES BE MADE, BUT IT WILL CAUSE UNCERTAINTY AND FRUSTRATION FOR THE BUILDERS.**

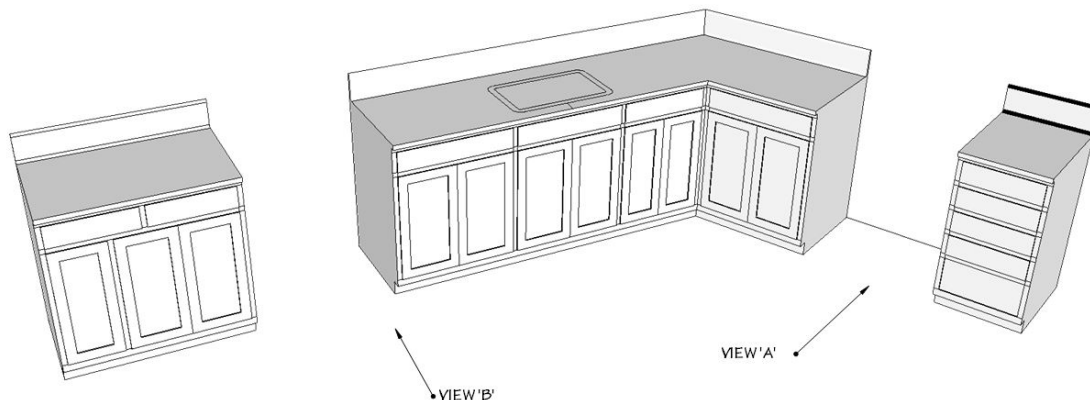


Fig 15

**An detailed perspective view of elements like kitchen cabinets is useful for the builders.**

And dimensional detail is essential

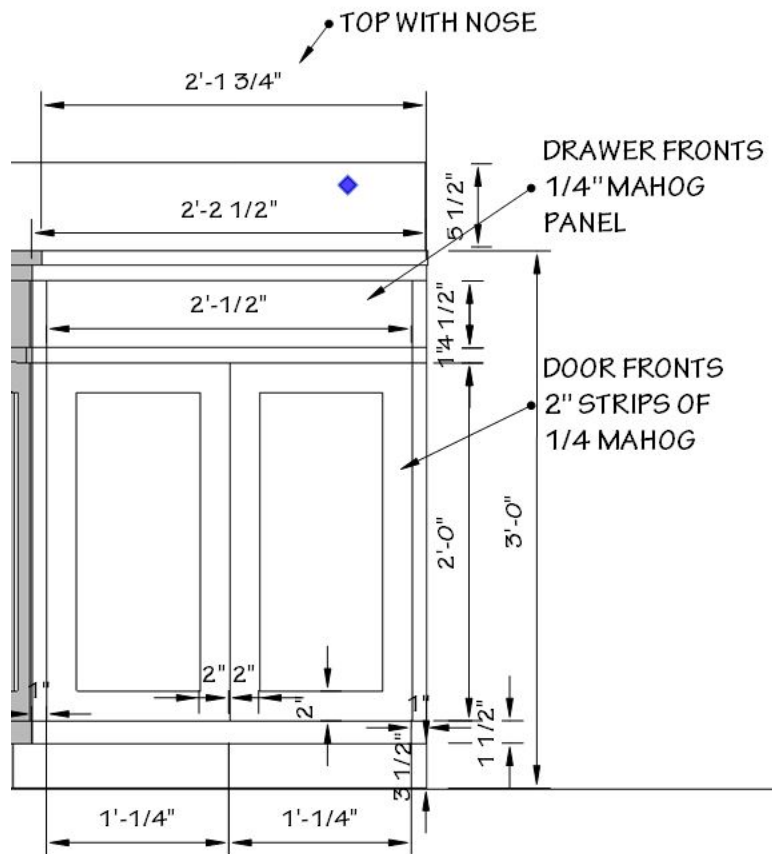


Fig 16

## FINISHES AND DETAILS.

In a professional environment, the set designer provides not only architectural, building detail information, but also specifics on stage props, (furniture), wall finishes, (paint and wallpaper), floors, (photos of faux finishes needed), set dressing, (paintings, wall sconces, etc.) . In short, the final, finished look of the set. The set designer should not think the job is done with a pencil drawing of the set plan and some elevation detail. Nor is an uncoloured model sufficient. I have often seen this as the final submission from a set designer.

Colour chips from a house paint supply store are sufficient to indicate to the director, lighting director and head carpenter and/or head painter. You must be specific where each colour is to be applied; perhaps using a code relating the colour chips to the areas on the design that get that particular colour.

Photographic samples of any faux finishes you require should accompany your design, whether it's old dark stained wood trim, barn board, faded stucco, stone or what have you. The painters shouldn't have to guess. Photographs of the style of door handles, cupboard knobs, etc. wanted are necessary.

Remember that new gallons of paint cost a lot, so please consider allowing the painters to mix the desired colours from available stock.

## SO NOW WHAT DO YOU DO WITH YOUR PLAN?

There should be a general production meeting where you can present all your finished drawings at least a couple of weeks before construction begins on your set. This is the great 'show-and-tell' reveal with lots of oohs and aahs. If you can make a scale model, (or maquette) of your finished plan, (recommended), it becomes a great tool not only for the director and actors, but also for all the other key stakeholders not the least of which is the head carpenter and his crew.

This model should be fully coloured using pencil crayons, water colour or pantone markers. A good way of doing this is to make the walls and architecture – *INCLUDING ALL MASKING FLATS* – with white foam core hot glued together, then lay out all your walls, floors, etc. on paper, colour them, cut them out and then glue them on the appropriate surfaces. This makes colouring a lot easier and more consistent than trying to colour the model itself.

The set model should be presented within a scale model of the stage itself.

Make sure all the furniture and other major stage props are included. If it's something too detailed or specific to make, there are lots of supply firms that sell this sort of stuff, (i.e.

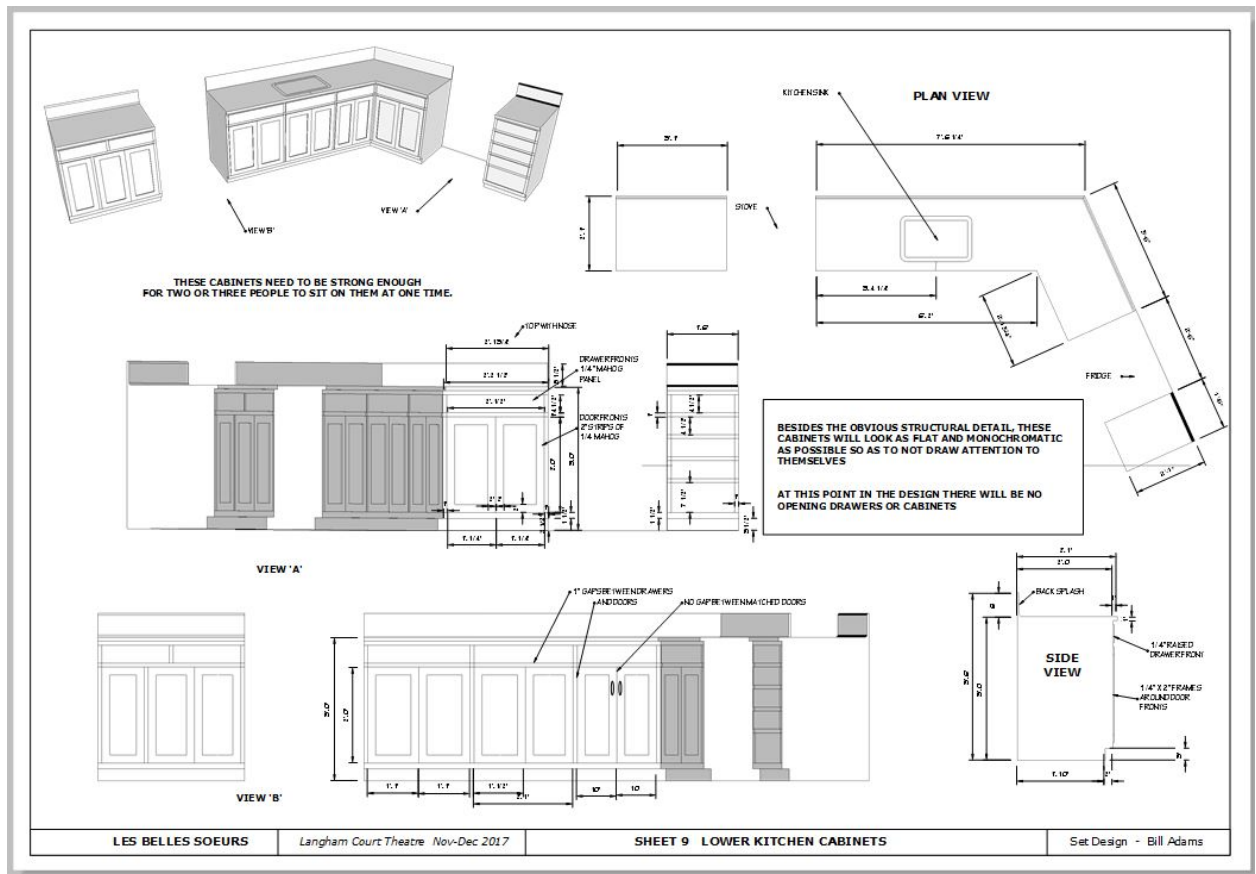
<http://www.adollhouseshoppe.ca/>) . Rough approximations of furniture and other things usually suffice. Modelling clay, (i.e. FIMO) can be used to make irregular shaped pieces. Have a little box to contain all the small pieces because the model will be moved about and small pieces could get lost.

The set designer should have a **final set of four or five (or more) large scale sheets**, (a 16" X 24" sheet fits a 1:24 scale drawing of the Langham stage). Having all the sheets the same size is convenient and avoids smaller, letter-sized sheets getting lost in the shop. These sheets can be printed off paper originals or a PDF file at Island Blue. There should be several sets:

1. The stage manager should get a sheet with the front perspective view and a plan, (top) of the set with measurements, (see Fig 8.) for laying out the set in the rehearsal area and on the stage, (or for a play with multiple scenes, one of each for each scene.)  
The stage manager usually wants letter-sized plan drawings to include in his/her prompt book.
2. The lighting designer needs the front perspective view and plan(s) of the set in the 1:24 scale
3. The head scenic carpenter needs a full set of everything.

**THE HEAD CARPENTER NEEDS THE FULL SET OF DRAWINGS AT LEAST TWO WEEKS BEFORE BUILDING COMMENCES. THIS GIVES HIM TIME TO WORK OUT DETAILS, IRON OUT ANY PROBLEMS, MAKE EXTRA DETAILED DRAWINGS AS NEEDED, ESTIMATE AND ORDER MATERIALS AND BE TOTALLY READY TO HAVE HIS VOLUNTEER CREW ARRIVE AND COMMENCE BUILDING. ALSO (in the case of a Langham show) IT ALLOWS SOME SMALL ELEMENTS OF YOUR SET TO BE BUILT WHILE THE PREVIOUS SHOW IS STILL RUNNING.**

**IF THERE IS TIME AND INTEREST AT THE END OF THE SECOND SESSION I CAN GIVE A QUICK DEMONSTRATION OF THE POWER AND VERSATILITY OF SKETCHUP.**



Bill Adams

REFERENCES:

## THEATRE TECH INFORMATION

1. McPHERSON THEATRE: <https://www.rmts.bc.ca/rental-information/mcpherson-playhouse-technical-info>
2. ROYAL THEATRE: <https://www.rmts.bc.ca/rental-information/mcpherson-playhouse-technical-info>
3. METRO THEATRE: <http://intrepidtheatre.com/venues/metro-studio-theatre/technical-specifications/>
4. CHARLIE WHITE THEATRE, SIDNEY: [http://marywinspear.ca/sites/default/files/uploads/users/shared/venue/specs/tech\\_packageapr2018.pdf](http://marywinspear.ca/sites/default/files/uploads/users/shared/venue/specs/tech_packageapr2018.pdf) (limited information)
5. OAK BAY HIGH SCHOOL; DAVE DUNNET THEATRE: <http://davedunnet.ca/theatre/#specs> (limited information)

## OTHER RESOURCE INFORMATION

1. Best site for stage fabrics, (check it out; some really cool stuff here). [www.rosebrand.com](http://www.rosebrand.com)
2. Custom cut foam moulding [https://www.plastifab.com/technical-library/design-manual/plasti-fab\\_company\\_brochure.pdf](https://www.plastifab.com/technical-library/design-manual/plasti-fab_company_brochure.pdf)

PlastiFab can cut specific mouldings and other things in 4' or 8' lengths. Just provide them with a PDF file of the profile you want and the total length of the material needed. Their shop



is in Delta, the finished product is quite reasonably priced and because it's so light, shipping is not expensive. It's the white, styrofoam cut out of large blocks with a hot-wire cutter. It's best to coat the visible side with a mixture of white glue, plaster and water, and the sand when it's dry prior to final painting. This gives a nice, smooth consistent finish.

3. SketchUp tutorials: <https://help.sketchup.com/en/sketchup/getting-started-self-paced-tutorials> If you're interested in using the computer graphics program, SketchUp, there are hundreds of tutorials on line. This site will walk you through the initial orientation to the program.