

2022

In Darkness There Is Light: Designing for The Insect Play

Seret Teresa Cole

West Virginia University, senglest@mix.wvu.edu

Follow this and additional works at: <https://researchrepository.wvu.edu/etd>



Part of the [Other Theatre and Performance Studies Commons](#)

Recommended Citation

Cole, Seret Teresa, "In Darkness There Is Light: Designing for The Insect Play" (2022). *Graduate Theses, Dissertations, and Problem Reports*. 11223.

<https://researchrepository.wvu.edu/etd/11223>

This Thesis is protected by copyright and/or related rights. It has been brought to you by the The Research Repository @ WVU with permission from the rights-holder(s). You are free to use this Thesis in any way that is permitted by the copyright and related rights legislation that applies to your use. For other uses you must obtain permission from the rights-holder(s) directly, unless additional rights are indicated by a Creative Commons license in the record and/ or on the work itself. This Thesis has been accepted for inclusion in WVU Graduate Theses, Dissertations, and Problem Reports collection by an authorized administrator of The Research Repository @ WVU. For more information, please contact researchrepository@mail.wvu.edu.

**In Darkness There Is Light: Designing for
*The Insect Play***

Seret Cole

Thesis Submitted to
the College of Creative Arts
at West Virginia University

In Partial Fulfillment of the Requirements for the Degree of

Master of Fine Arts

In

Scenic Design and Technology

Robert Klingelhofer, Professor of Scenic Design: Chair

Steven Neuenschwander, MFA, Program Head/Clinical Professor of
Technical Direction

Cornel Gabara, MFA, Associate Professor of Acting

School of Theatre and Dance

Morgantown, WV

2022 Keywords: The Insect Play, Scenic Design, Set Design, Scenery, Theatre Design

© 2022 Seret Cole

ABSTRACT

In Darkness There Is Light: Designing *The Insect Play*

Seret Cole

This serves as documentation of my scenic design process for the School of Theatre & Dance at West Virginia University's production of *The Insect Play* by Karel Čapek. This thesis includes a plot summary, text analysis, and historical context. It also contains conversations with the director and design team, as well as a description of my design process befitting the needs of the play. The design aspects will be presented through research photos, models, drafting plates, and execution photos. It will conclude with a self-reflection of the overall production process.

Dedication

For my husband, David Cole, and my children Finnegan and Drexal Cole, and Jason Englestad

For my parents, Mary and Bill Dodd, and Gary and Wanda Brown

Thank you for your understanding, patience, love, and support as I journeyed through the wilds of graduate school. Your sacrifices did not go unnoticed.

Acknowledgements

Thank you to Professor Robert Klingelhofer whose mentorship and guidance has been greatly appreciated and invaluable. I am especially grateful to have started my initial academic theatre career in 1995 and to come have been able to come full circle with the completion of my academic career under his guidance and direction. The amount of knowledge and pearls of wisdom gained are immeasurable.

A special thank you to Professor Troy Snyder (Fairmont State University) and Professor Steven Neuenschwander for pushing me to succeed.

Thank you to Professor Mary McClung, Professor Alan McEwen, Professor Radhica Ganapathy for your support and willingness to answer questions and provide advice on better ways to accomplish tasks.

To Ms. Kathy Casuccio, for sparking the imaginative theatrical bug in 1993.

To Desireé Childers, for being my graduate school survival buddy. Your reassurance that I was on the right path when I questioned my life choices and was ready to admit defeat, is what helped me get this far.

Thank you to my wonderful neighbor Keisha Skupien and her family for helping with childcare, lots of coffee, great food, laughs, and keeping me on track throughout the process.

Table of Contents

Abstract	ii
Dedication	iii
Acknowledgements	iv
Table of Contents	v
Table of Figures	vi
Introduction	1
Part I. The Play	2
Historical Background.....	2
Plot Summary and Analysis	4
Initial Design Meeting/First Conversation with the Director.....	11
Part II. The Design Process	16
Research	16
Rough Design Sketches.....	24
White Model.....	29
The Drafting Process	34
Final Model	38
Part III. Design Execution	42
The Budgeting Process	42
The Build and Paint Treatment Process	56
The Load-In Process.....	68
The Technical Rehearsal Process	70
Part IV. Conclusion	72
Production Review	72
Appendix A: Production Photos	75
Appendix B: Build Photos	82
Appendix C: Drafting Plates	88
Bibliography	108

Table of Figures

Fig. 1 Inspiration Collage of The Traveller and His Mental State.....	12
Fig. 2 Cricket Exoskeleton	13
Fig. 3 Microscopic View of Human Bone - Endoskeleton	13
Fig. 4 Industrial Warehouse	14
Fig. 5 Australian Cricket Nest in a Brick Empty	14
Fig. 6 Water Lilies by Claude Monet, 1919	16
Fig. 7 Die Nacht (The Night) by Max Beckmann.....	17
Fig. 8 Gassed by John Singer Sargent.....	18
Fig. 9 Rebirth by Amy Guidry.....	19
Fig. 10 Brontosaurus Mirage by Dave Curtis	19
Fig. 11 Out of Africa by Dave Curtis	19
Fig. 12 Geopoliticus Child Watching the Birth of the New Man.....	19
Fig. 13 Oedipus Complex by Salvador Dalí.....	20
Fig. 14 Millet’s Architectonic Angelus by Salvador Dalí	20
Fig. 15 Atavistic Ruins after the Rain by Salvador Dalí	20
Fig. 16 Model of a Mandibular Reconstruction with Grafting.....	20
Fig. 17 Untitled by Unknown Artists.....	21
Fig. 18 Scaled up section of Figure 17.....	21
Fig. 19 Bone smear with stain	21
Fig. 20 Section of an ant’s nest.....	21
Fig. 21 Various chrysalises	22
Fig. 22 The Chrysalis, Architect – Marc Fornes/TheVeryMany/Living Design Lab for Inner Arbor Trust, Columbia, MD. Photo credit: Jeffrey Totaro	22
Fig. 23 Preliminary design sketch done with director	24
Fig. 24 Vector works 3D rendering of initial design with chrysalis cube	24

Fig. 25 Second preliminary design rough sketch	25
Fig. 26 Third preliminary design sketch.....	26
Fig. 27 Initial design sketch.....	27
Fig. 28 Insect eye - fly	27
Fig. 29 Up close view of a dragonfly wing.....	28
Fig. 30 Rough white model.....	29
Fig. 31 White model front view.....	31
Fig. 32 White model top view.....	31
Fig. 33 Ground plan.....	34
Fig. 34 Section view from center line	34
Fig. 35 SR wall unit front view	35
Fig. 36 SR wall unit back view.....	35
Fig. 37 US wall unit.....	35
Fig. 38 SL wall unit front and back view	36
Fig. 39 SL arch radial measurements	36
Fig. 40 Sidewalk platforms.....	36
Fig. 41 Section of Wall Unit, Ductwork, and Manhole Cover	37
Fig. 42 Manhole Elevations	37
Fig. 43 Front view	38
Fig. 44 Front view with dungball.....	39
Fig. 45 Top front view.....	39
Fig. 46 SR View	40
Fig. 47 SL View	40
Fig. 48 Top View	41
Fig. 49 Archeological Reminiscence of Millet’s Angelus by Salvador Dalí	44
Fig. 50 Top view of a mayfly, Photo credit: B. Schoenmaker	45
Fig. 51 Redesign ground plan	47
Fig. 52 Redesign section view.....	47

Fig. 53 Redesign bridge platform walkway	48
Fig. 54 Redesign US wall unit	48
Fig. 55 Redesign SL wall unit.....	49
Fig. 56 Redesign SR wall unit & manhole	49
Fig. 57 Redesign front view look A.....	50
Fig. 58 Redesign front view look B.....	50
Fig. 59 Redesign front view look C.....	51
Fig. 60 Redesign front view look D.....	51
Fig. 61 Redesign SL view.....	52
Fig. 62 Redesign SR view.....	52
Fig. 63 Redesign ground plan with 4 ladders	53
Fig. 64 Redesign front elevation and ladders	54
Fig. 65 Redesign section view with ladders.....	54
Fig. 66 Final redesign ground plan with 2 ladder placements.....	55
Fig. 67 Assistant Technical Director, Patrick LoRiccio works with lab students to stabilize the Luan so the wall pattern could be sketched on	56
Fig. 68 Luan arranged, and pattern sketched	56
Fig. 69 Students work together to cut out wall unit with jigsaw	57
Fig. 70 Steel framework and pipes are attached	57
Fig. 71 Attaching the bending plywood.....	58
Fig. 72 Technical Director, Mr. Christopher Sheriff, works with work-study students to manipulate box steel to match the outline of the bridge balcony platform	59
Fig. 73 Technical Director, Mr. Christopher Sheriff welding the rebar to the steel	59
Fig. 74 Fossilized bone	60
Fig. 75 Wall coated in elastomeric.....	61
Fig. 76 Finished wall treatment	61
Fig. 77 Table, chairs, and stools with bone paint treatment	61
Fig. 78 River Rock.....	62
Fig. 79 Scumble coat	62

Fig. 80 Lab students work to create the organic floor shapes	62
Fig. 81 Finished paint treatment.....	63
Fig. 82 Rebar	63
Fig. 83 Dung-Beetle with Dung-ball; Photo Credit: San Diego Zoo.....	64
Fig. 84 Exercise Ball, Realistic Hand, and Foot	65
Fig. 85 Wrapping the exercise ball in muslin and attaching the hand and foot.....	65
Fig. 86 Gluing on the strips of burlap	65
Fig. 87 Coating with elastomeric	66
Fig. 88 Actors working with the dungball	66
Fig. 89 Dungball's final look	66
Fig. 90 Assembling the bridge to attach the staircase and ladders	67
Fig. 91 Loading in of the bridge and wall units.....	68
Fig. 92 Finished look.....	69

Introduction

In the Fall of 2020, I was assigned the scenic design for West Virginia University's Fall 2021 production of Josef Čapek and Karel Čapek's play, *The Insect Play* to fulfill my thesis requirements. The show was scheduled to open on November 18 and served as my first fully realized production due to Covid-19 which forced the cancellation of my previous design show *Dance Nation* by Clare Barron.

Our production was directed by Professor Cornel Gabara and Stage-Managed by undergraduate Ms. Natalie Tirendi, BFA, Theatre Design and Technology, and Assistant, Stage Manager undergraduate Ms. Katie Smith, BA, Theatre. The production team consisted of Lighting Design by Professor Alan McEwen, Costume Design by Professor Mary McClung, and Sound Design by undergraduate Ms. Alexis Allenbaugh, BFA, Theatre Design and Technology, Technical Director, undergraduate Mr. Christopher Sheriff, BFA Theatre Design and Technology and Assistant Technical Director, fellow graduate student, Mr. Patrick LoRicco, MFA, Technical Direction. I also served as the Props Supervisor.

A preliminary meeting was held with all the designers prior to the end of the Spring 2021 semester. This meeting helped to establish a cohesive vision for the show. It allowed the Director, Professor Gabara, to fully explain what he envisioned and to answer any questions or concerns that the designers may have had at that time. Designers were given an opportunity to voice their preliminary design visions and obtain feedback from the collaborative group. Each collaborator then worked throughout the summer crafting their designs for the final design deadline of September 13, 2021.

Part I: The Play

Historical Background

The Insect Play was written by brothers Josef and Karel Čapek. Josef, born in 1877 and Karel, born in 1890 to parents, Antonin Capek and Bozena Capekova. The family lived in Male Svatonovice until they moved to Prague in 1907. Josef later went to art school, while Karel attended Charles University in 1909 and earned his Doctorate in 1915. (Harkins 1-6, 14) Josef became a well-known and respected Czech painter, while Karel worked as a journalist and authored novels and short stories. (Wellek 191, 206)

Karel was unable to serve in World War I because he suffered from a spinal disorder that caused calcification of part of his spine. (Harkins 6) Both brothers became leaders in the avant-garde movement in Prague, supporting Czech nationalism. (Harkins 6-9) Anna J.

Stoneman's *Socialism with a Human Face: The Leadership and Legacy of the Prague Spring*, states that prior to the end of the first World War, the brothers lived under harsh Communist rule where censorship of the media, free thought, expression, behavior, and even travel were discouraged. The Czech Republic, formerly Czechoslovakia, was under this Communist occupation for decades. However, following the end of World-War-I, in October 1918, Czechoslovakia declared its independence after the fall of the Habsburg Empire. For about the next twenty years, the region prospered. (Stoneman 103)

The two brothers began their collaboration for *The Insect Play* after World-War-1 in 1920. (Harkins 72) Depending upon the translation, it could also be known as "*The Insect Comedy, The World We Live In,*" and "*And So Ad Infinitum.*" (Harkins 177) Initially published in 1921 as *Ze života hmyzu*, which literally translates from Czech to English as, *From the Insect*

World. (Harkins 9, 177, 184) For this thesis, I will use the title that we worked from, *The Insect Play*. O. Pilný's *The Brothers Čapek at the Gate: R.U.R. and The Insect Play* states that *Ze života hmyzu* premiered at the National Theatre in Brno, Czechoslovakia, on 3 February 1922. The play premiered in London's West End at the Strand Theatre in 1926. (Price 67) The brothers wrote ten plays collaboratively over twenty years. (Čapek vii-ix)

Plot Summary and Analysis

Through the eyes of the Traveller, we witness a world filled with very brief moments of joy, followed by the harshness of reality. *The Insect Play* forces one to consider the short comings of humanity such as: greed, blind loyalty, murder, and the grim truth of our ultimate demise – death. It's a play that brings human nature, both good and bad, to the forefront of our thinking. It is also a reflection on the realities of the cycle of life.

The Insect Play is written in an episodic fashion. In the prologue, we are introduced to the Traveller who serves as a unifying character throughout the entire play. The Chrysalis is also present throughout the play; however, she doesn't speak until Act Two. The other characters appear only during their moment within an act, and then do not return or reappear. The play opens with a soliloquy from the Traveller who enters in stumbling and drunk. His appearance is that of a man who has fallen on hard times and is very much down on his luck. His abrupt start to the play begs spectators to ask, what preceding elements brought him to this point. His soliloquy also helps to establish the possible trajectory for what is to come.

In our version of the play, the Traveller is a veteran who is at his lowest point in life and has turned to alcohol to cope. He serves as a moral compass to the spectator by calling the actions of the insects into question. Throughout the play, the Traveller is searching for any sign of hope to cling on to and missing the mark until it's almost too late. He drifts increasingly out of the conscious realm, and into a hallucinogenic state where he examines all his past transgressions, until his death in the epilogue.

The Traveller's soliloquy is interrupted by the introduction of the Professor, a Lepidopterist, who is chasing after butterflies to document and record them for her collection. She professes to have an appreciation of the butterflies but only through a scientific lens, failing to see their beauty. The Professor and the introduction of the butterflies sets up the transition between the Prologue and Act One. The Traveller's closing monologue at the end of prologue foreshadows the environmental aspects and human nature that is to come.

Act One, *The Butterflies* begins the shift from the Realistic to Surrealistic by immediately taking us into the mental instability of the Traveller. It stages man vs self through temptation, selfishness, vanity, and man's response to these. Throughout the act, the internal struggle of self-worth and self-value in beauty is on full display in the butterflies, who showcase this by only caring about themselves and by their lack of empathy and compassion for others. They are only concerned with their looks and what they can gain from their playful, flirtatious, and sexually suggestive behaviors. For example, the female butterfly Clythie admires herself in a mirror and then tries to win over the Traveller with her charm but is met with disapproval. Instead of reflecting upon this and correcting her inappropriate behavior, she selfishly goes back to her mirror. The butterflies also mock the death of another butterfly who was eaten by a bird, and Iris, who becomes pregnant, is more concerned about losing her figure, than about the health and wellbeing of her unborn child(ren). The act concludes with the male butterfly Felix who has authored a poem for Clythie that portrays the power of a woman in love. Clythie ignores Felix's attention and leaves. Felix chases after her, desperate to be heard.

In our production, as stated before, the Chrysalis is present throughout the first act; however, she was silent, and no real attention was given to her. Act Two provides the Chrysalis with a voice who proclaims intermittently throughout the remainder of the play that her birth is

imminent, right up to the very moment of the event. The Chrysalis represents hope and rebirth of not only life but of possibilities too.

The Čapek brothers create a juxtaposition to the positive Chrysalis with the entrance of the Dung-Beetles through their shameless name calling as they enter with their precious commodity, a ball of dung. Through the lens of the play, we see the greed of humanity in the anthropomorphism of these beetles. They care only about obtaining more wealth and are not content with just one nest egg. It is clear from their entrance that they do not even have any true physical or emotional connection with one another. This can be confirmed when Ms. Dung-Beetle goes in search of their missing ball, and Mr. Dung-beetle re-enters, totally consumed by the whereabouts of his dungball. Upon his exit, rather than calling for his wife, he calls out regarding the injustice of his missing dungball.

The beginning of Act Two also introduces the Ichneumon Fly and his daughter, Larva. The Ichneumon Fly is very prideful about his gluttonous daughter and boasts about her to the Traveller. The Larva has an insatiable appetite and the Fly comments about how he brings her fresh food regularly. While on the outside, one could argue that this is simply a father providing for his child; however, the way he goes about his greedy killings suggests otherwise.

Shortly after the exit of Mr. Dung-Beetle, we meet Mr. & Ms. Cricket. They are the polar opposite of Mr. & Ms. Dung-Beetle, and their positivity rivals that of the Chrysalis. Ms. Cricket is pregnant, and like any expecting parent they want to find a suitable living space for their family. Opportunistically, Mr. Cricket finds them shelter in a recently abandoned home of a cricket that was killed by a bird only days ago. Ms. Cricket is hesitant at first about moving in, but her husband assures her that it is a good home. To ease Ms. Cricket's concerns, Mr. Cricket mockingly re-enacts the murdered cricket's death.

Mr. Cricket exits and Ms. Dung-Beetle re-enters. She snobbishly compares her commodity to the expectant commodity and home of Ms. Cricket. Both wives display their inner greed with an argument over which is more important, financial wealth or personal property. The women's behavior brings their ethics, morals and/or vices into focus. To Ms. Beetle, her dungball is more important than the life of another being, including her husband; while to Ms. Cricket, her ethics and moral lie in being able to have a nice home for her unborn child and having a husband who can provide for them.

Ms. Dung-Beetle exits, and their argument is all for naught, as the reappearance of the Ichneumon Fly leads to him quickly killing Ms. Cricket and dragging her off to feed his child. The Traveller is mortified to witness the carefree and callous actions of the fly. It is at this point that we are introduced to the very envious and manipulative, Parasite. The Parasite is a smooth talker that uses persuasive speech to get what he wants. He manipulates the situation to gain the trust of the sympathetic Traveller, while at the same time pretending to be submissive to the Ichneumon Fly to protect his own interests.

Mr. Cricket reappears looking for his wife, only to meet the same end. The Traveller is once again horrified by the realities of life. The Parasite jumps into action claiming that he shall serve justice for the wrong doings of the Larva and the Ichneumon Fly. He enters the Ichneumon Fly's home and gluttonously consumes the Larva and all the food within the Fly domicile. The Parasite claims to be doing the Traveller a favor by taking revenge for the actions of the Fly when he kills and eats the Larva as he exits, only to use his own personal needs to justify his actions.

The Traveller struggles internally regarding the morality and immorality of the Fly's and the Parasite's "eye for an eye" behavior that he has witnessed by claiming that "It's not humans,

it's only insects". (Čapek 136) He uses this as an excuse to reason his way out of the situation. Through the cloud of darkness, the Chrysalis presents another ray of hope that slips past the Traveller who is caught up in his own mind trying to justify what is happening around him. Act Two ends with the Parasite's line, "Nature's bounty is wide open to all." (Čapek 137) This is fitting considering that Act Three deals with the struggles of Ants, who are always in search of bounty, and thus establishes a verbal link between acts.

Act Three still portrays the Traveller wallowing in self-pity with bits of hope sprinkled in from the Chrysalis. He is desperately clinging on to the possibility of hope and comes to the realization that to be part of humanity one needs to be part of something greater. Furthermore, he realizes that when one is part of something much larger than oneself, one needs to be willing to make sacrifices for the good of all.

In Act Three, the Ants, reflect the side of humanity that blindly does what they are told to do, because they are led to believe that it is for the good of the whole. The Ants also personify the human condition of man vs. man, with their constant battles and need to defeat other colonies of ants. The Red Ant's leader proudly proclaims that they have defeated the other colonies and the Traveller responds, "defend the path between two blades of grass." (Čapek 149) When the Yellow Ants are seen as a threat to their way of life, the Red Ants declare war on the Yellow Ants. The Inventor Ant, believes that they have built the next generation of perfected war machines, which will help lead the Red Ants to victory over the Yellow Ants. This Inventor displays humanity's selfish need to be better than others by having the next biggest and greatest thing. In their hunger for power and domination, the ants declare war against the Yellow Ants.

In our production, the director had one of the Red Ants die while preparing the colony for war. This reflected the true nature of ants themselves, who work or fight for their colony until

they die and are then carried off by other worker ants. At first the war is going in their favor; however, it quickly takes a turn, and the Red Ants are annihilated by the Yellow Ants. Act Three ends with the Yellow Ants pompously declaring that their actions were justified and glorified. Completely fed up with all the death that has come before, the Traveller kills the leader of the Yellow Ants. This action concretely ends the feuding and death spiral. While he can't accept the braggadocious Yellow Ant's defeat of the Red Ants his behavior causes him to realize that he isn't any better than anyone else.

Throughout the play, the Chrysalis' hope has eluded the Traveller; however, he starts to find it in the final part of the play. The Epilogue is both the darkest and the brightest moment in the play, as the Traveller learns that even in the darkest moments of life light can be found, if only one takes a moment to look for it. It begins with the Traveller afraid of what is yet to come and wrestling with the fact that he too has taken a life. His actions went against his own moral compass, and all of this has left him feeling empty and lost. In his desperation for salvation from despair, he begins to call out into the dark void for help.

Leading up to this point in the play, the Traveller has been aimlessly looking for hope and not finding any. Finally, when he is in his deepest pit of despair he calls out for light and seeks comfort through connection. In that moment, he is greeted with shining bits of hope in the light of the Mayflies. These sparks of hope dwindle and fade quickly though, much like the actuality of the life cycle of a Mayfly. The Traveller also realizes that he is reaching the end of his own life cycle. His desperation is evident through his increasing pleas to remain alive. All the while, the Chrysalis is still offering up hope and declaring that her birth is near. Her affirmation gets even louder and more intensified, as the moment draws closer, until finally the catharsis of

her birth. Then just as quickly as she is born, she dies, leaving the Traveller feeling even more hopeless.

At the very end of the play, we see the Traveller struggling to take his last breath, fighting for the life and the hope that he now realizes was there all along, but has been too blind to recognize. He realizes that hope lies within the act of living, and that nature is constantly reminding us of the beautiful cycle of life. As the Traveller is about to take his final breath, two slugs appear. They observe the dead Mayflies and comment on how they “can’t eat them” (Čapek 163), and how thankful they are to be alive. A final reminder that the life cycle goes on, even after death.

The Čapek brothers capture the cycle of life through their work in *The Insect Play*. They take us on a journey of maturation and raising and providing for a family. They examine the differences between the upper, middle, and lower classes through economic hardships and work, as seen in the insects of Act Two and the Ants in Act Three. They portray the evolution of birth and death. They remind us of such human conditions as man versus self and man versus nature, as well as human nature’s desire to find the silver lining, that even in our darkest hour there is always light to be found, if we just take the time to look around.

Initial Design Meeting/First Conversation with the Director

During spring semester of 2021, the design team met with the director via Zoom due to Covid-19 safety precautions. Professor Gabara explained that he envisioned Act One with the butterflies taking place in a bar, and the Mayfly Chrysalis in a go-go dancer style cage. We also discussed the idea of how “the seven deadly sins” related to the themes and symbolism within the text of the play. Collaboratively, we also determined that the time-period was contemporary post-war, and the Traveller would be a Veteran of the Vietnam War. We also established that the world of the play would be more Surrealistic than Realistic.

Over the summer, I began to work on formulating my design concept based on our initial meeting discussion. I gathered research images and worked towards creating a rough white model to better convey my design thoughts to the director. I also read and re-read the play multiple times. The first time I read it was for the simple enjoyment of the text. The second time I looked at what the stage directions and the authors said about certain characters, objects, or events within the text. The third time I focused on what the characters say about other characters, objects, or events. The fourth time was to examine what the characters said about themselves. With the fifth reading, I sought to understand the subtext and looked up words, terms, phrases, or customs that I was uncertain of or wanted a better understanding. Following the sixth reading of the text, I searched for anything that I might have missed. I would continue to read and re-read the text throughout the entire process of this production to ensure that my design met the needs of the text and my director.

After many readings, and discussions up to this point, I decided to examine the world through the eyes of the Traveller, as he was the central unifying character and narrator. I began to consider how his mental state directly and indirectly affected his perception of the world around him both visually and auditorily. To better understand this concept visually, I created a collage (Fig. 1). In the

center of the collage is a man with a typewriter, a rooster and an owl coming out of his head.

To me, the man

represented the

Traveller, the typewriter

represented the text, and



Figure 1: Inspiration Collage of The Traveller and His Mental State

the two birds represent good and evil, or light and dark. I included butterflies and other imagery such as soldiers and put them to the right and left of the man's head to represent the two ant armies. I included images of angels to represent the hope that the Traveller was seeking and bits of surrealistic paintings to represent the mental state of the Traveller. The burlap frame surrounding it spoke to the Traveller's mentality that could unravel at any time. This collage also served as inspiration for some of the colors and textures for the show.

Having established through whose lens the world of the play was viewed, my next step was to determine who built it – the insects or the humans. Furthermore, how were they connected, and how did that connection influence the look and feel of the world. Once I could

establish these answers, I could then consider how to better incorporate Professor Gabara’s concept of the go-go dancer cage for the Chrysalis.

On the outside, insects and humans do not seem to have much of a physical connection; however, if you look on a much deeper level – a more microscopic level, similarities emerge. Both humans and insects have skeletons. Insects have exoskeletons (Fig. 2), and humans have endoskeletons (Fig. 3). It was this realization that served as the catalyst for my design. While this did help to explain the question of how humans and insects are alike, this finding failed to answer the question of who built the world of the play. I could not build a complete design concept, nor the rough model without this important question being answered. Therefore, I still could not explain my scenic vision to Professor Gabara.



Figure 2: Cricket exoskeleton



Figure 3: Microscopic view of human bone - Endoskeleton

Seeking to discover who built the world, I began thinking about the words themselves - who built the world of the play? This world should include buildings, homes, and other environmental elements. The words “home” and “infrastructure” kept coming back to me. How were human homes and infrastructure like that of an insects? In exploring this idea, I came across a photo of an industrial warehouse (Fig. 4) and an Australian cricket’s nest (Fig. 5).

Similarly, these also tied to my initial discovery in that both the Australian cricket's nest and the warehouse are remarkably close in structure to that of the human bone.



Figure 4: Empty Industrial Warehouse



Figure 5: Australian Cricket's Nest in a brick

Finally, having made the connection between the human world and the insect world, I was able to answer who built the world of the play. Our world was built by humans, and their architectural design shapes were influenced by the habitats of the insects. Having established this concept, I was able to move forward with building a rough white model to show and discuss with the director.

Before the start of the semester, I met with Prof. Gabara to discuss my concept and rough model. The model consisted of two main wall units. One on stage right and one on stage left. Collaboratively, we discovered that an additional wall unit was needed. We discussed using duct work to tie in the industrial aspect of the show, particularly in Act Three with the Ants. The duct work also mimicked the connectivity of the bone and the Australian cricket nest. We also discussed putting the upstage wall unit on a slight tilt to create more visual interest and mimic the structural anatomy of bone. We discussed how to incorporate the Chrysalis within the set that resembles the Go-Go Dancer cage idea and the idea of connectivity of bone. During our discussion, we discovered that the two downstage units resembled the shape of an insect's head, further connecting the world of the play to the script. Upon the conclusion of this meeting, I began creating the drafting plates for the set, including the ground plan, the section, and the elevations. I also created a more complete model in preparation for our first production meeting.

Part II: The Design Process

Research

When I began researching for the show, I started out with the question of who built the world of play. As discussed earlier, I concluded that our world was built by humans whose architectural features like arching connections and general shapes were inspired by insects. Having made this discovery, I turned my focus to the insects themselves and how their influences might affect the look and shape of the set. In doing so, I examined how various forms of art: surrealism, impressionism, expressionism, and symbolism overlapped and connected.

Starting with the Butterflies and the Chrysalis, I imagined what their world would look and feel like in a surrealistic world. In my research, I came across one of Claude Monet's 1919 paintings of Water Lilies (Fig. 6). Monet painted a variety of different impressionistic looks for his Water Lilies, by using assorted colors and brush strokes. I settled on this image, because it reflected the darks and lights of the world of the play, as well as the moments of stillness. While there is stillness in the piece, there is also subtle movement, which reminded me of the theme of



Figure 6: Claude Monet's 1919 Water Lilies

the cycle of life that runs throughout the course of the play. The colors, to me, reflect that of a butterfly and what I envision their world to look like through color. While the distorted imagery in the water has a surrealistic quality to it.

Insects live a very chaotic life on the surface. They are always in a constant pursuit of something. Max Beckmann's painting, "Die Nacht (The Night)," captures this chaos through movement and line. (Fig. 7). There is so much going on in this expressionistic piece. The undertones of mystery, and



Figure 7: Die Nacht (The Night) by Max Beckmann

the juxtaposition of light and dark speaks to the surrealistic subconsciousness of the text. In this painting, I see the Larva and her father, on the right with the figure in the beret, who looks like he's on a mission, and the girl clinging to him like a daughter may do with her beloved father. I can see Mr. Beetle in the middle of the painting through the figure with the pipe. His small body position is rounded like a beetle. His pulling on the figure's arm beside him reminded me of a person who is trying to get something out of someone else and is willing to do whatever it takes to get it, even if that means hurting someone. The figure whose wrist is being held, reminded me of Mr. Cricket with his long lanky arms, legs and slender frame. His facial expression and angle of his head, to me, reflected the Cricket's unfortunate end. In the back, the figure in the red shirt

with a yellow button reminded me of the Parasite with his stalking stare who is waiting for his moment to strike. Hiding in the shadows on the far left is the Traveller, observing it all.

Ants live very ordered and structured lives. Within a colony, groups of ants, such as soldier ants and worker ants, have their own role to play for the health and well-being of the colony. Those groups will perform their duties to their utmost abilities until the day they die. Ants also conjure up visions of military personnel marching off to war, blindly following the ant in front of them. This imagery can be found in John Singer Sargent's painting, "Gassed" (Fig. 8).



Figure 8: *Gassed* by John Singer Sargent

Sargent beautifully portrays the harsh realities of war in this piece. You can see the men who are blindfolded, trusting that the leader of the line will get them through to safety. You also see the casualties of war through the wounded and dead lying on the ground. Sargent's painting reminded me of the fight between the Reds Ants and the Yellow ants.

When considering artistic inspiration for the world of the play, I turned to artwork of Amy Guidry, Dave Curtis, and Salvador Dalí. Several of their paintings reflected my initial idea of human and insect connectivity, and/or reflected the overall theme of the cycle of life. For example, Amy Guidry's painting entitled, "Rebirth," beautifully captures this theme (Fig. 9). Her



Figure 9: Rebirth by Amy Guidry

imagery of the skull and the moth's reminded me of the entirety of Act Three where we are introduced to the moths who have just been born, only to die very shortly afterwards.

Dave Curtis's recent surrealistic paintings,

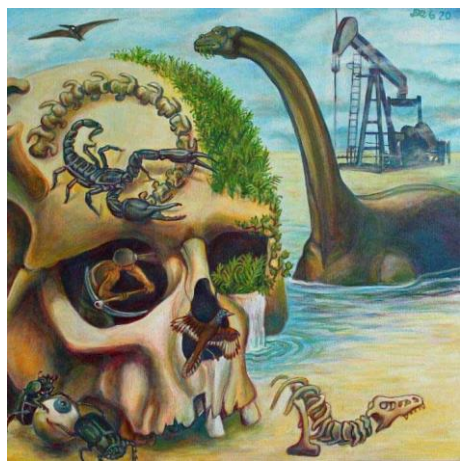


Figure 10: Brontosaurus Mirage by Dave Curtis

“Brontosaurus Mirage” (Fig. 10) and “Out of Africa” (Fig. 11), reminded me of the Australian cricket's nest. They also reflect the cycle of life through the imagery of a brontosaurus and an oil derrick in one painting, and a dinosaur skeleton and the birth of a man from the skull in the other one. Both paintings present imagery reflective of

The Insect Play text

through the dung-beetles, rolling eyeballs as their precious commodity, and the miners working within the skulls who reminded me of the ants.

Dave Curtis' painting “Out of Africa” reminded me of the Salvador Dalí painting, “Geopoliticus Child Watching the Birth of the New Man” (Fig. 12). They both use the same depiction of the birth of man. Several other of Dalí's paintings would serve as a jumping off points for the physical shapes of the world of the play. For example, Dalí's “Oedipus Complex” (Fig. 13), his “Millet's Architectonic Angelus” (Fig. 14), and his “Atavistic Ruins

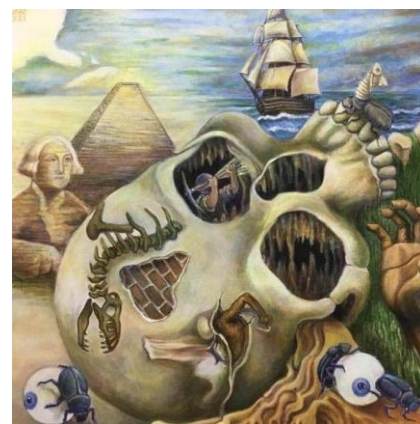


Figure 11: Out of Africa by Dave Curtis



Figure 12: Geopoliticus Child Watching the Birth of the New Man by Salvador Dalí

after the Rain” (Fig. 15). These paintings all reflected the microscopic bone and Australian cricket’s nest through their shape, form, and line flow. Dalí’s “Atavistic Ruins after the Rain” reminded me of a dental model for a mandibular reconstruction with grafting (Fig. 16), thus linking back to my initial theory of how humans and insects are alike.

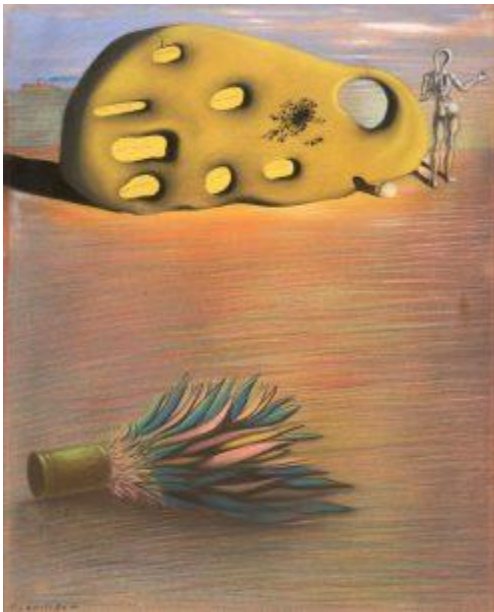


Figure 13: Oedipus Complex by Salvador Dalí

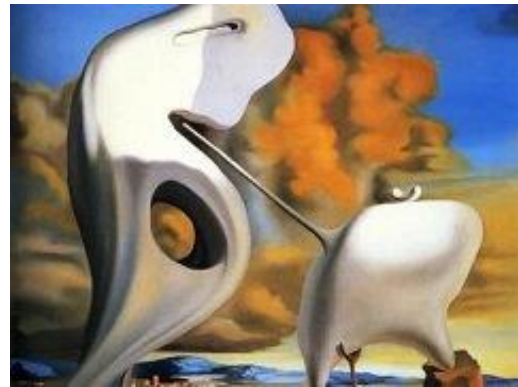


Figure 14: Millet's Architectonic Angelus by Salvador Dalí

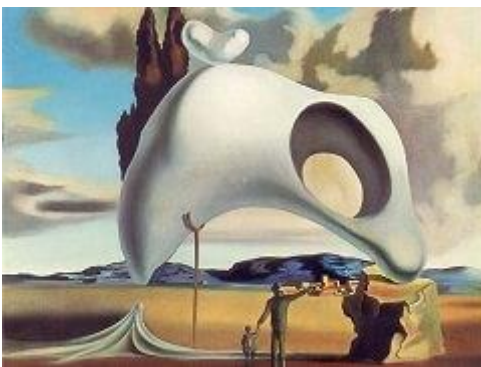


Figure 15: Atavistic Ruins after the Rain by Salvador Dalí



Figure 16: Model of a Mandibular Reconstruction with Grafting

In Dalí's, Curtis' and Guidry's paintings, the gentle flow of the lines, and the whimsical and playful nature of the art pieces themselves helped to establish the organic composition of the wall units for the world of our play.

For the floor treatment, I found a piece of art (artist unknown) (Fig. 17) and I sampled a small section of that and adjusted the scale (Fig. 18). I then realized that it resembled a microscopic view of a bone smear (Fig. 19). A bone smear is usually stained so that certain aspects are more visible. In this case the bone smear was stained using a Wright-Giemsa stain which causes the pink coloration. To find further



Figure 17 Untitled by Unknown Artist

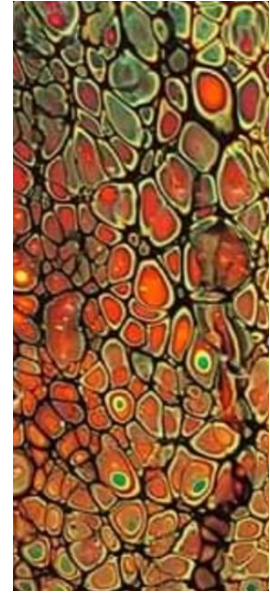


Figure 18: Scaled up section of Fig. 17

correlation between insects and bone smears, I found a picture of a section view of an ant's nest that reflected some of the natural and organic shapes and pathways found in bone smears (Fig. 20).



Figure 19: Bone smear with stain



Figure 20: Section of an ant's nest

For the design of the chrysalis, I looked at a few diverse types of chrysalises (Fig. 21). While their overall structure and purpose is the same, each example has its own unique quality and texture. The organic twists and turns of a chrysalis are like those seen in the paintings and microscopic bones and pictures. These features help to unify my original design concept. In linking the chrysalis to the human world through architecture, I found a picture in an online article from the *Journal of the American Institute of Architects* that was posted on August 16, 2017, by Amanda Kolson Kurley entitled, *The Chrysalis* (Fig. 22). The architectural arches here not only reflect the arching shapes of a chrysalis, but they also reminded me of the openness of both soft and spongy bone tissue. The overall shape of *The Chrysalis* structure can also link back to the Australian cricket's nest.



Figure 21: Various chrysalises



Figure 22: *The Chrysalis*, Architect - Marc Fornes/TheVeryMany/Living Design Lab for Inner Arbor Trust, Columbia, MD. Photo credit: Jeffrey Totaro

Throughout the research phase, I considered how certain aspects were related to my initial question of how insects and humans are connected. I successfully found correlations between both the human and the insect world through line, form, and composition. In all the research, I was able to link together how these objects reflected my initial idea of our worlds being connected at a more microscopic level.

Rough Design Sketches

Early on, I envisioned the set consisting of a rake, with an internal disc that rotated like a bowl around a central axis, and I had the chrysalis being a cube with webbing that resembled an Australian cricket's nest. (Fig. 23, Fig. 24) Alternatively, I had the chrysalis as a large ball of twisted metal that would be lifted at the top of Act One. My idea was that each part of the show the internal disc would turn and reveal openings for characters to walk through. In Act Two, when the Ichneumon Fly drags the crickets off to his daughter, Larva, I envisioned the characters sitting on the higher edge of the platform in the downstage position, and the

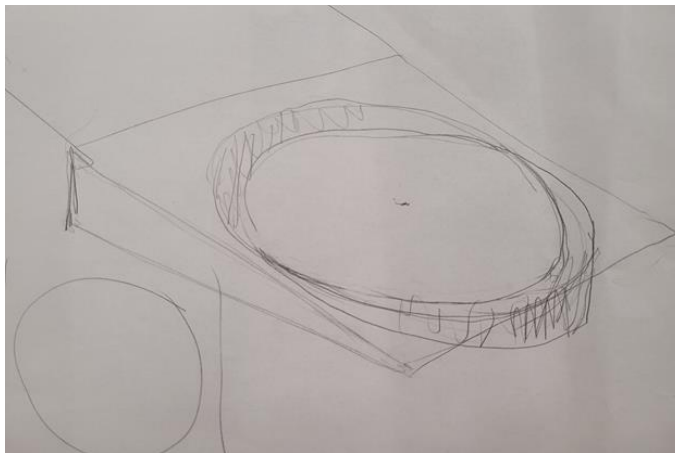


Figure 23: Preliminary sketch done with the director

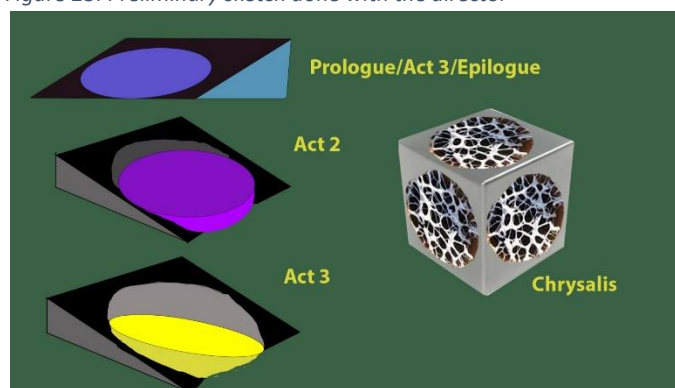


Figure 24: 3D Vectorworks of preliminary design and chrysalis

Fly could creep up behind them, grab them and they could use the upstage downward slope of the disc to slide down and off into their home. This design was quickly scrapped after 3D drafting it in Vectorworks. I realized that to build the raked stage and have the disc rotate to allow actors to enter underneath, the platform slope itself would be too steep for actors to walk on, and therefore would not be safe.

Upon this realization, I turned back to the art of Salvador Dalí. Using his Oedipus Complex, (Fig. 13) I quickly drew another rough sketch after talking more with the director about his vision for the play. From our discussions, we established that the butterflies would be

in a bar or bar like setting. Utilizing the overall shapes found in the Oedipus Complex, I envisioned a bar-like interior setting. It would consist of a platform that would mimic a sidewalk and have the arch attached to it. There would be various other moving pieces, for example another wagon could wheel in behind the main sidewalk platform that would have a bar with stools, and the barback would consist of stain glass and wooden panels that mimicked the designs found in a spiderweb, a solitary bee or wasp nest as well as the Australian cricket's nest. The outside of the arch would be designed so that it resembled an insect's wing. The bar wagon could then roll away, and other wagons or design pieces could be added to create the varying worlds within the play (Fig. 25).



Figure 25: Second preliminary design sketch

I learned incredibly early on not to get married to an idea or concept, and to allow for flexibility and growth within your own personal design world. After some reflection, I realized that this idea was also flawed for many reasons, as the design would restrict the action of the play. It also didn't address the needs of the Chrysalis. I met again with the director, and we discussed the concept that in the prologue the Chrysalis would start the play at deck level, then at

the beginning of Act One, the Chrysalis would lift into the air and remain suspended until the end of the play. At the end, the Chrysalis would slowly descend, and she would step out having just been born.

Using Dalí's *Atavistic Ruins after the Rain* (Fig. 15), the image of the mandibular reconstruction with grafting (Fig. 16), and *The Chrysalis* (Fig. 22) I revised the previous idea and sketched out a design that had a curving ramp, and two sets of stairs, (Fig. 26) along with a

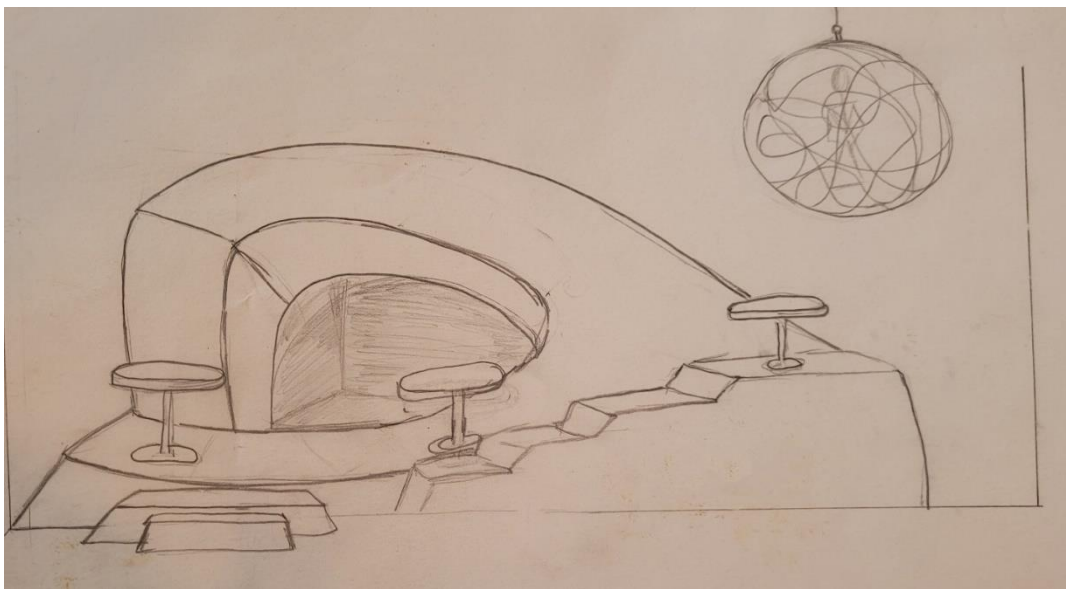


Figure 26: Third preliminary design sketch

circular chrysalis Go-Go Dancer-like cage. With this design, elements such as tables and chairs could be pulled on and offstage as needed, the opening underneath the ramp could be utilized as a cricket or ichneumon fly home, the ramp could be used by the ants, and the chrysalis sphere could rise and descend. There would be a grand staircase for the Chrysalis to walk down while declaring her birth. I let go of this design due to the angle and steepness of the ramp and it didn't really serve the needs of the play.

I decided to let the design for the show rest for a while in the back of my mind. During this time, I reread the script, I researched more about the authors and what life was like during the time in which the play was written, and I worked through the summer break to discover who built the world. Once I established the connection between the humans and the insects, I sketched out a design that utilized all my prior research (Fig. 27). In this design I

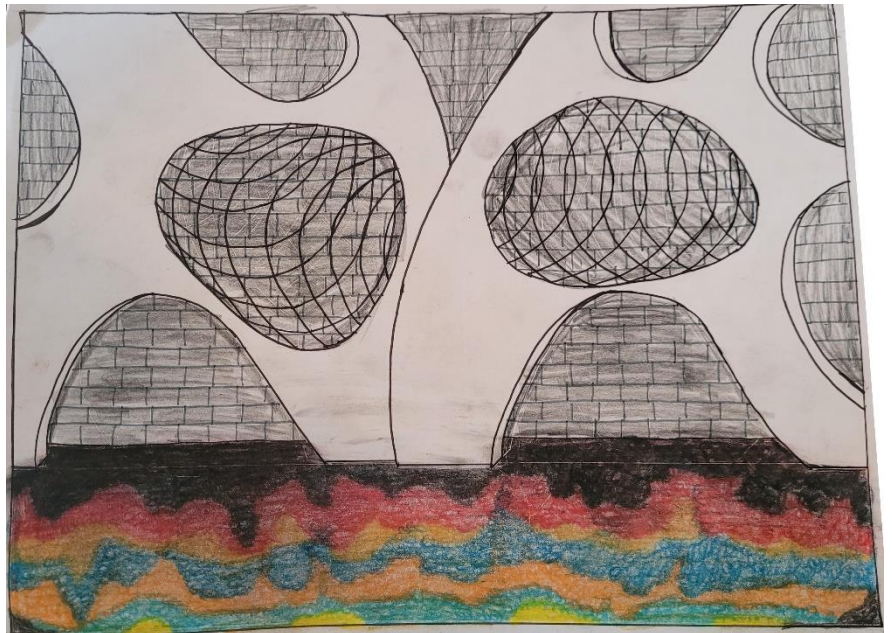


Figure 27: Initial design sketch

envisioned two main wall units that could serve as buildings or homes. The arches would serve as entrance and exit portals, and the caged areas mimicked that of an insect's eye (Fig. 28). One

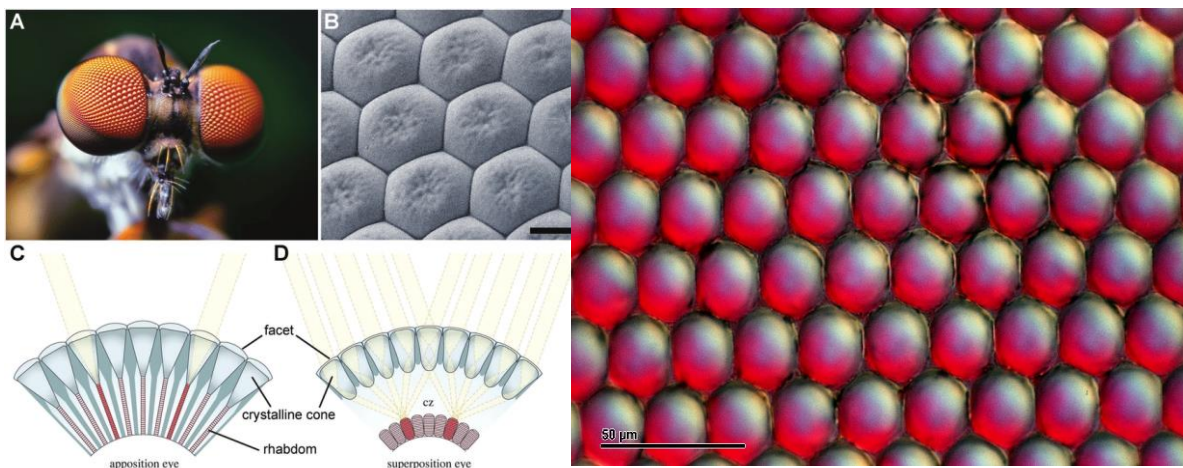


Figure 28: Insect Eye - Fly

side could be where the chrysalis resided and the other could be multifunctional as befitting the needs of the play, and the action. The floor at this point, was to be reflective of an insect's wing (Fig. 29) and utilized the untitled art piece (Fig. 17). It was a world that reflected the microscopic

connectivity between the human world and the insect world. It was now time for me to work on my white model to show Professor Gabara at our meeting prior to the start of the semester.



Figure 29: Up close view of a dragonfly wing

White Model

Utilizing the initial design sketch, I created a rough white model to show to Professor Gabara at our meeting prior to the start of Fall 2021 (Fig. 30). This model consisted of the two main wall units. I showed the design sketch to Professor Gabara and explained that the idea for the openings would be rebar fashioned to resemble an insect's eye and the floor treatment would resemble an insect's wing. The Chrysalis would be on a platform behind one of the openings. The Larva's room or cricket's nest could be in the other opening. We discussed my connection between the insect world and the human world through a microscopic lens, and how that related to my design concept of a world containing surrealistic fluidity through shape and form.



Figure 30: Rough White Model

We decided that another wall unit was necessary upstage, and that it should be on a tilt to provide more depth and dimension, as well as to better incorporate the natural architecture within the bone and insect nests. We discussed adding platforms that could mimic sidewalks and structures that linked the wall units in a ductwork like fashion that would aid in the industrial feel of Act Three with the Ants. This would also help tie the set together in a more cohesive fashion. Along with this, together we decided to extend the platforms for the “eye” openings in front of the wall unit to give more flexibility to the action of the play.

I discussed how I wanted the word “insect” to be a subtle existence within the world of the play, thus the textures and paint treatments would be blurred representations of an insect. I didn’t want the insect elements to stand out. Instead, I wanted them to accentuate the structures overall creating surrealistic movement through the flow of organic lines in the wall and floor designs. While discussing this concept, Professor Gabara pointed out that the shapes of the two wall units resembled that of an ant’s head, and the idea of one wall unit being representational of the Red Ants, and the other wall unit being representational of the Yellow Ants. Furthermore, the fact that one wall was directly facing the other wall, helped to display the polarization and confrontations that could be found throughout the text with regards to the ants themselves and the idea of the cycle of life, where the opposite of birth is death. After our meeting, I immediately began working on a more concrete white model that brought together all the design element changes and concepts for our first design meeting in the coming weeks (Fig. 31-32).



Figure 31: White Model Front View

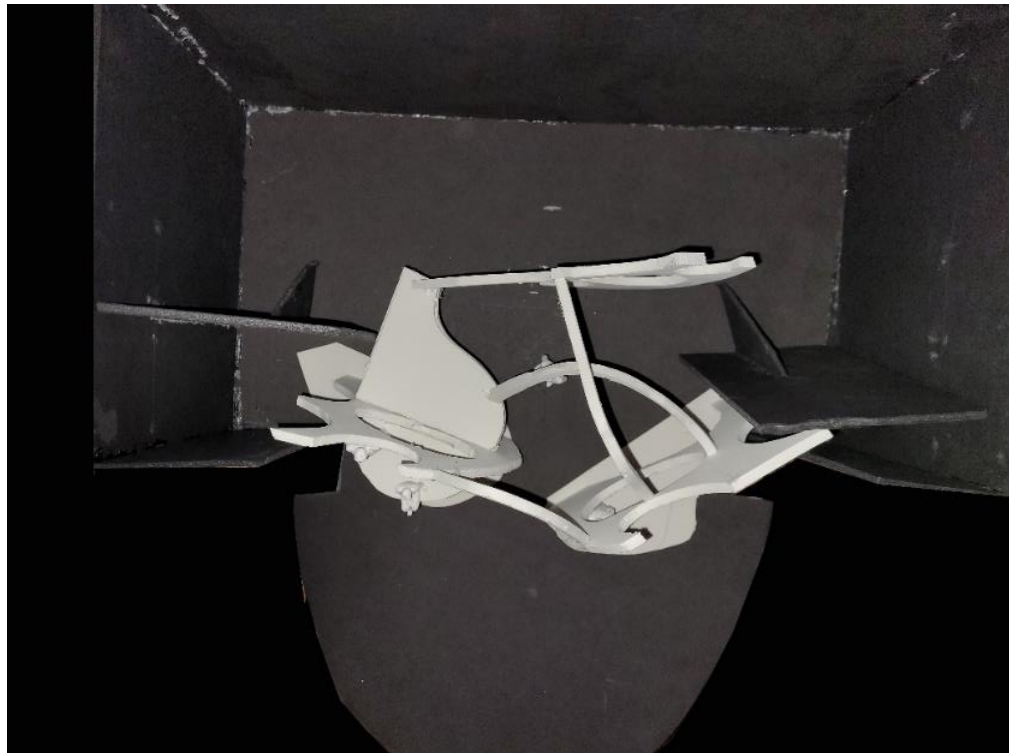


Figure 32: White Model Top View

The first production meeting was held shortly after the start of the Fall semester. I explained my concept to the design team and presented the white model for further discussion and suggestions. We discussed putting a platform behind the stage left wall unit for actors to access and possible staircase locations for both the stage right and stage left platforms. We also discussed adding more design elements to the downstage area to create more visual interest. The idea of a manhole cover downstage center as part of the floor treatment was presented. We discussed how the wall units could serve as representational buildings and their base platforms could represent sidewalks for street-like pathways. In Act One, the butterflies could bring out a café like table and chairs in front of the stage left opening, and the stage left wall unit would serve as a representation of a building for the butterflies to come in and out. We discussed angling the stage left wall more to make it more visually interesting and to allow for better sightlines for the upper stage left platform and for the Chrysalis, who I envisioned would reside on the stage right upper platform.

We also had a discussion of what materials would be used for the bars on the “eyes” and railing around the platforms. It was suggested that ½-inch rebar be used as this would help create the city aesthetic and it could be easily bent. The rebar would also maintain its shape, and it would provide enough support when used as a handrail. It was also suggested that it could be easily painted and wouldn't require a lot of special treatment with regards to paint. The addition of the rebar and the overhanging balcony on the front of the stage right wall unit meant that it would need to be appropriately counterbalanced for it to be safe for actors to use. Based on the design presented, the idea of using a cantilever in my design was discussed to help ensure stability of the wall units.

Another item of discussion was the material that would be used for the three connecting pieces that linked the set together. I suggested that the connections would consist of semi-rigid flexible aluminum ducts that would connect directly to each wall unit at a specific location. The ductwork would serve two purposes, to help establish a sense of place and provide a small amount of additional structural support. After the meeting, I researched the types and sizes of rebar and boxed steel and investigated the types and styles of ductwork that could be used. I incorporated all the revisions that were discussed and began the drafting process.

The Drafting Process

Having completed the white model, I began working on the drafting for the production. Using a scale ruler, I was able to accurately measure the dimensions of my white model and replicate them in Vectorworks beginning with the ground plan (Fig. 33). For the ground plan, I started with the manhole and the platforms. To achieve the various organic

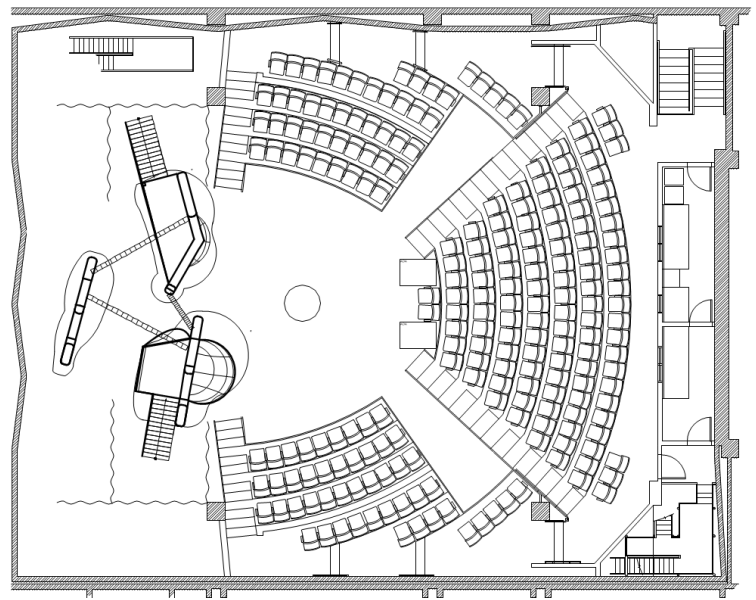


Figure 33: Ground Plan

shapes, I created a combinations of ovals, circles and rectangles and manipulated them with the cut tool until I achieved the desired shape. I had difficulty with the wall units because of their varying heights across the top due to the organic shapes. Initially, I had height notations and arrows to show the direction of a downward curve, but I later removed those. I used built in tools in Vectorworks to create the stairs and the duct work, but I was later advised that this was incorrect and my staircases would extend futher than what I had. Once the ground plan was completed, I turned my attention to drafting the section view from the centerline in Vectorworks

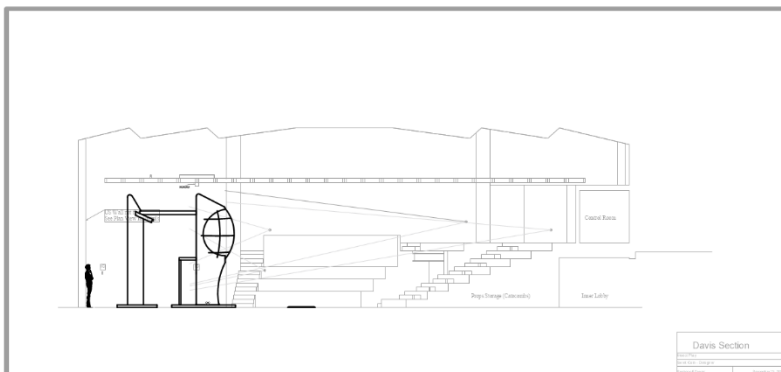


Figure 34: Section View from Center Line

(Fig. 34). I found that drafting the downstage wall unit was a bit of a challenge when manipulating the rebar design element. I also had trouble drafting the angle of the wall,

and I failed to show the thickness of the wall unit and placement of the cyclorama. Afterwards, I began to systematically draft out the set elevations, treating each section as if I was writing instructions on solving a puzzle. I focused on the wall units first and then the deck platforms and the manhole cover. For the first plate, I drafted the stage right wall. I started with the front view by creating a rectangular box. Using the arc, circle, oval, freehand and trim tools, I created the overall shape of the wall and dimensioned everything (Fig. 35). For the second plate, I focused on the side, balcony, and back views of the stage right platform with dimensions (Fig. 36).

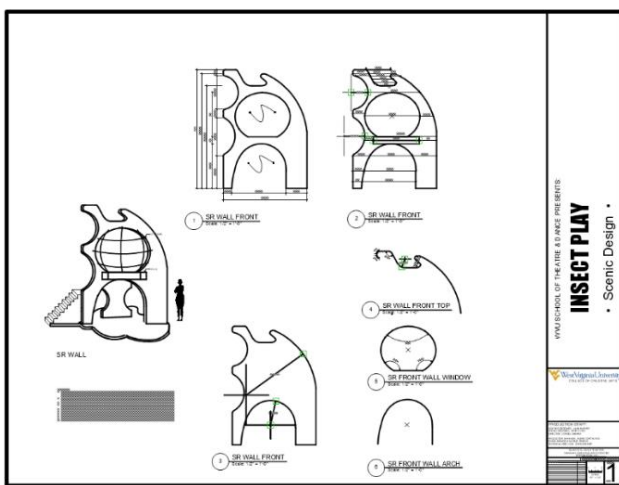


Figure 35: SR Wall Unit Front View

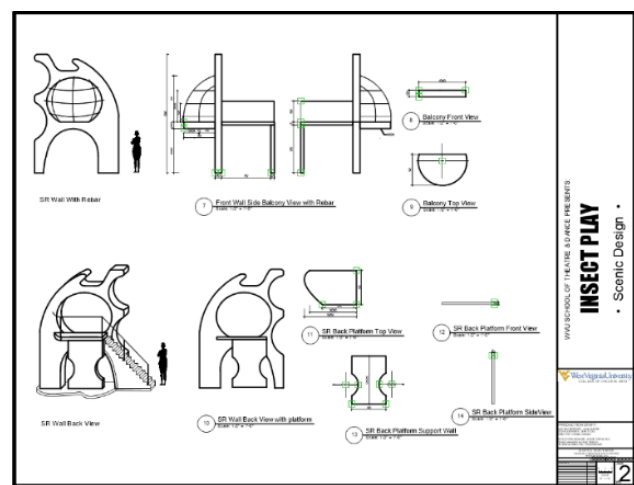


Figure 36: SR Wall Unit Back View

The third plate was the upstage slanted wall unit. For this unit, I copied the stage right wall, notated the cut line, and dimensioned (Fig. 37). The fourth plate was for the stage left wall. I found this plate to be difficult to accurately communicate given the bend in the wall. I used the same process to create the overall shape of the wall, and then I added cut lines for where the bend in the wall should occur

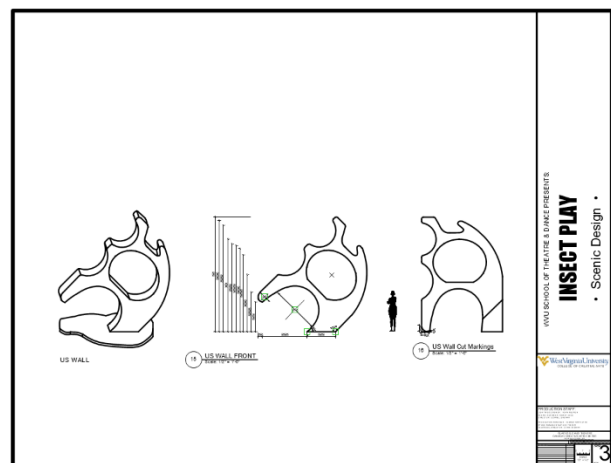


Figure 37: US Wall Unit

along with a top view. Since the eye opening wasn't a perfect circle or oval, I broke that down into dimensions (Fig. 38).

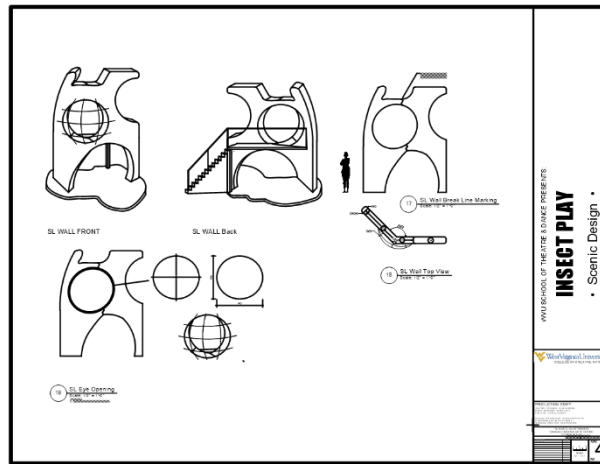


Figure 38: SL Wall Unit Front and Back View

The stage left wall unit had several different organic angles, so in the fifth plate I copied the main wall unit and dimensioned the radial arc measurements (Fig. 39). The last piece of the elevation drafting puzzle, the sixth plate, contained top elevations of each wall unit and

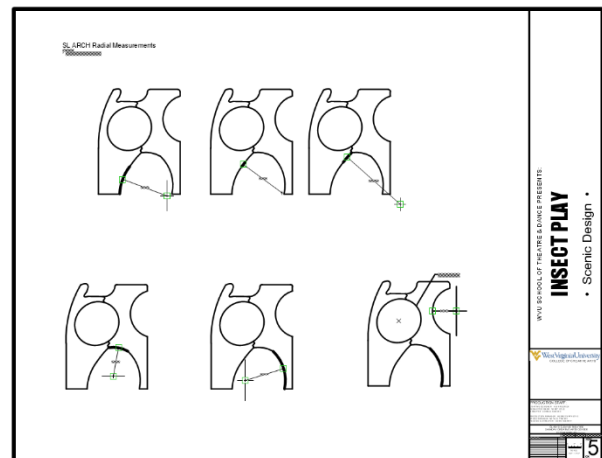


Figure 39: SL Arch Radial Measurements

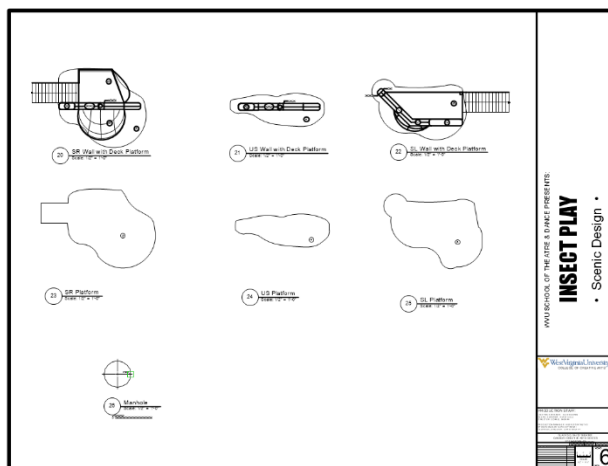


Figure 40: Sidewalk Platforms

then the overall shape of the platforms and manhole cover, which I drafted in more detail separately. I also added the heights to the platforms but failed to go back and do any further dimensioning (Fig. 40). The last plate of drafting defined the makeup of the wall units

themselves, the ductwork, and the manhole cover elevations (Fig. 41-42).

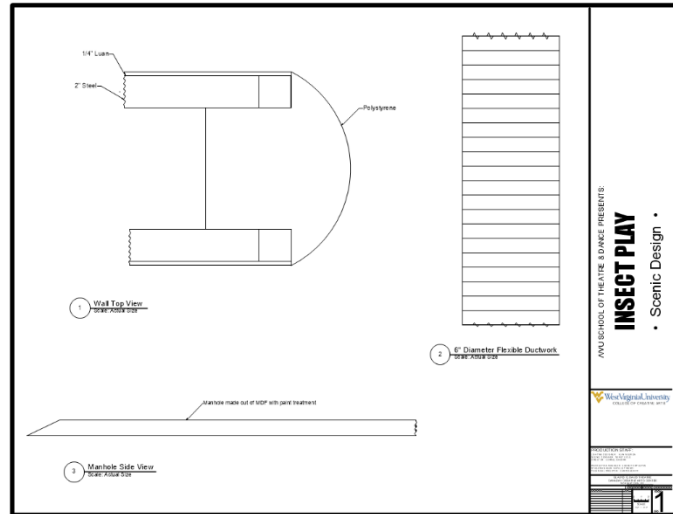


Figure 41: Section of Wall Unit, Ductwork, and Manhole

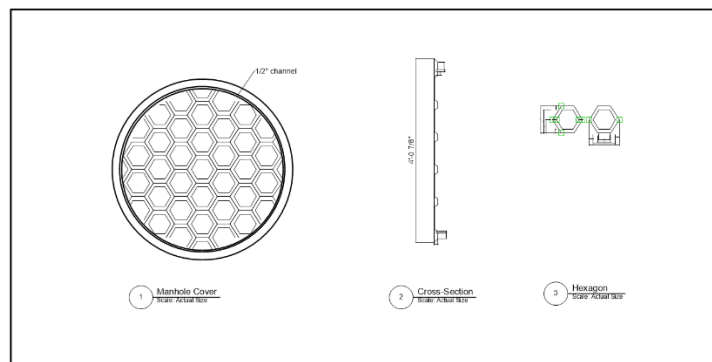


Figure 42: Manhole Elevations

Final Model

Upon completion of the drafting process and utilizing the measurements established, I made a final model to share with the design team. For this process, I used a polystyrene foam and carved out the wall units. I coated them with Jaxsan 600 White Acrylic Latex and painted on a watery plaster mix. Once that was dry, I sponge painted them using varying shades of brown, tan, and cream. For the sidewalk platforms, I cut foam board and painted them a taupe color. I then cut, painted, and attached 18-gauge hobby wire to create the railing and eye cages. Next, I attached a rope that was painted to resemble the look and paint treatment for the ductwork. For the manhole and the floor, I printed out a copy of the paint treatment. I attached the manhole to a thin piece of foam since the actual manhole would be higher than the deck by 1-inch. I also decided to create a miniature version of the dungball for the final design process because it could affect the placement of walls and having it allowed me to present how the dungball itself might be rolled on and off stage (Fig. 43-48).



Figure 43: Front View



Figure 44: Front View with Dungball



Figure 45: Top Front View



Figure 46: SR View

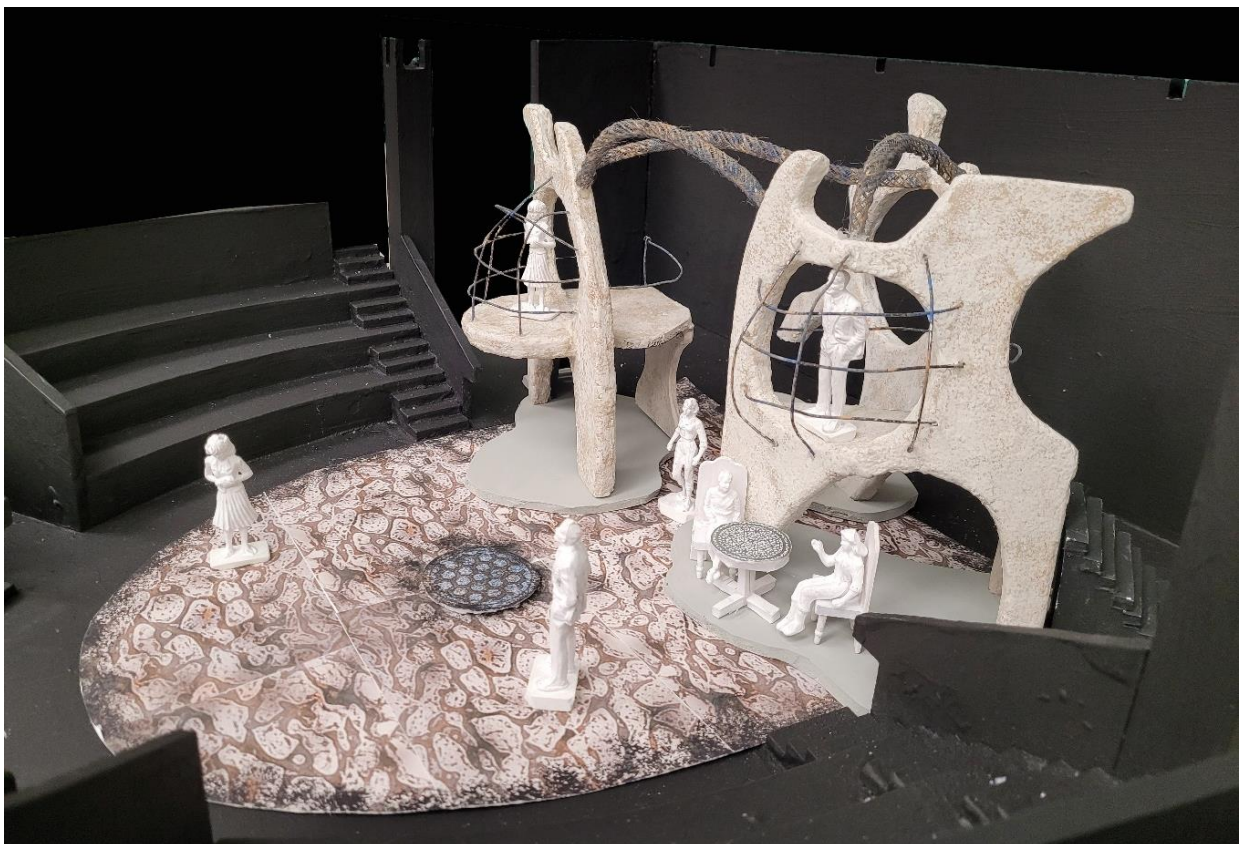


Figure 47: SL View



Figure 48: Top View

My next step was to present my final design and wait for the budgeting process to be completed and make any adjustments. During the final design presentation, Professor Steven Neuenschwander voiced concern over the final budget cost for my design, and so I began to proactively consider changes that I may want to make should the design go over budget. I requested a meeting to speak with my advisor, Professor Robert Klingelhofer, to discuss options and bounce ideas on how I may be able to incorporate elements of my current design into a possible new design.

Part III: Design Execution

The Budgeting Process

Going into the budgeting process, I was aware that the overall estimated cost for my current design far exceeded the limits of the scenic budget. Despite this possibility, I turned in my design package to my Technical Director, undergraduate, Mr. Christopher Sheriff and waited to see exactly how far over my current design would be. In the meantime, I spoke with the director and my advisor about various elements in the design that we could eliminate to be more cost-effective. We determined that the sidewalk platforms would be the first thing cut from the design, and only having one balcony area instead of two.

The budget allotted for the productions was \$4,500.00. The number of hours allotted towards the actual build for the production was 500. Once the budget was completed, the total estimated cost was \$8,960.00 and the build hours were 580. I was over budget by \$4,460.00 and 80 hours. As a result, I would have to cut more than the sidewalk platforms and a single balcony. I had to now contemplate what elements of my design were important and necessary to help support the needs of the play.

Again, I sought the advice of my advisor, Professor Robert Klingelhofer. I explained that I needed to cut my design in half. We discussed the idea of cutting and dividing the set up into smaller sections and putting those sections on beams that would go from the deck to the grid. This would create a segmented picture that depending on how it was viewed, would create a whole and/or new picture. We looked through various design and art books that Professor Klingelhofer had in his office for inspiration. After some further contemplation, I had an idea of

how I wanted to proceed, but I needed to step away from it for a bit, and let the ideas marinate in the back of my mind.

After my meeting with Professor Klingelhofer, I discussed how we could cut the cost of the wall elements (all three of which the estimated cost for build was over \$1,000.00 and would take over 80 hours to build) with my technical director, assistant technical director, and Professor Steven Neuenschwander. We determined that the way I currently had the walls designed using polystyrene to create a smooth rounded edge (Fig. 44) could be done more cost-effectively, by eliminating the foam and using bending plywood to help create the same organic silhouette. Another element discussed was the overall thickness of the wall could be reduced to thinner sections based on sightlines.

I was given the budget on a Monday and was informed that I only had a few days to give an answer on how I would like to proceed. I explained that after speaking with everyone, I had an idea that would require me to redesign most of the set, but I needed to work out a few other elements first. I requested to know when was the absolute latest that I could turn in a redesign and was told that I had until Wednesday of that same week. I understood the urgency of the deadline and went to discuss my idea with the director.

During my meeting with director, I explained what had been discussed in my two prior meetings, and I asked what elements were essential to the actions of the play. I also questioned what elements could be eliminated. We both agreed that the sidewalk platforms could be cut. I explained that the elements that seemed to be the costliest were the wall units themselves and I discussed with him how Professor Klingelhofer and I considered the idea of segmenting the set. Professor Gabara wanted to have a grand reveal for the Chrysalis, and I stated that I would keep that in mind in redesigning.

That evening, I set about redesigning the set based on everything that was discussed earlier. I had a model box of the Davis Theatre in my design room that I would use to get a better idea of how the redesigned elements would look. The words, “cut in half”, referring to the budget kept coming to mind. I traced the wall units onto pieces of paper and then cut them out and tore them into smaller chunks. I crudely taped the pieces onto straws and arranged them in the model box to reflect a segmentation of the former whole. Immediately, I noticed major sightline and lighting issues. After trying multiple arrangements, I let that idea go as I felt that it would not serve the needs of the play.

I went back and researched some more paintings of Salvador Dalí and came across his *Archeological Reminiscence of Millet's Angelus* (Fig. 49). The tall humanoid structures reminded me of my wall units. I traced the wall units once more, and coming back to the idea of half, instead of tearing them into multiple pieces, I tore them in half. I taped these onto the straws



Figure 49: *Archeological Reminiscence of Millet's Angelus*

and arranged them within the model box. I quickly realized that six segmented wall units was too much, so I slowly reduced them down until I was left with three units. This kept within the original design concept of three wall units, but they were much smaller in size and shape. Each new wall unit was one half of the former whole wall unit. I also added a scrim to mask the back wall of the theatre and help add some more lighting options.

For the Chrysalis, in the new design, I created a 25-foot bridge that would span the stage from stage right to stage left with staircases on each end, and a half circle balcony protruding from the center of the bridge itself. This design was reflective of the head and wings of a mayfly (Fig. 50).

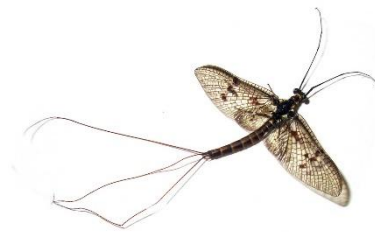


Figure 50: Top view of Mayfly. Photocredit: B. Schoenmakers

I created a railing using the 18-gauge wire to resemble rebar that went the length of the bridge on both upstage and downstage sides. I fashioned three upward protruding bars that I bent inward like the antenna of mayfly and mimicking the curvature of a chrysalis. I then wrapped wire around the railing. This reflected the movement of a mayfly's tail, and the veining of leaves and twisting of tree branches where chrysalises can be found.

The next morning, I shared my redesign with both Professor Klingelhofer and Professor Gabara. I explained that these wall units would be anchored onto a beam that went from deck to grid, and they could freely rotate around and be repositioned to reflect a location change. I offered some suggested looks for various scenes and locations. I explained that when the Chrysalis was born that there could be a shift in lighting, and she could run off the platform and

emerge from under the bridge. It was determined that the walls needed a bit more variation and I lost places for characters to hide behind or look out from, so I would need to go back in and recreate those.

My technical direction team voiced concern over the stability of the bridge structure, as with this initial redesign, I only had staircases and cable connecting it to the grid which would provide the stage right and stage left support, but it did not provide any upstage or downstage support. There was concern that with the action of the play, swaying could be a concern which could weaken the structure. I inquired on ways to make the bridge more stable, and it was determined that placing structure underneath the bridge and adding more points for cabling the bridge to the grid, would help add stability.

With this information, I began to complete the redesign. Initially, I had three random halves for wall units; however, I changed that to the front half of the original stage right wall and the back half of the original stage left wall to complete the downstage wall picture. I adjusted the “eye” so that they would line up to create a window opening at the top that would also allow for an arching portal on the bottom. The upstage unit was the front half of the original upstage wall unit. Underneath the bridge, I created two panels that mimicked the shape of a flower on one side and an insect head on the other. Both had cut outs on them that could represent windows or hiding spaces (Fig. 51-56). After completing the drafting, I handed them over for re-budgeting and built another more complete model (Fig. 57-62).

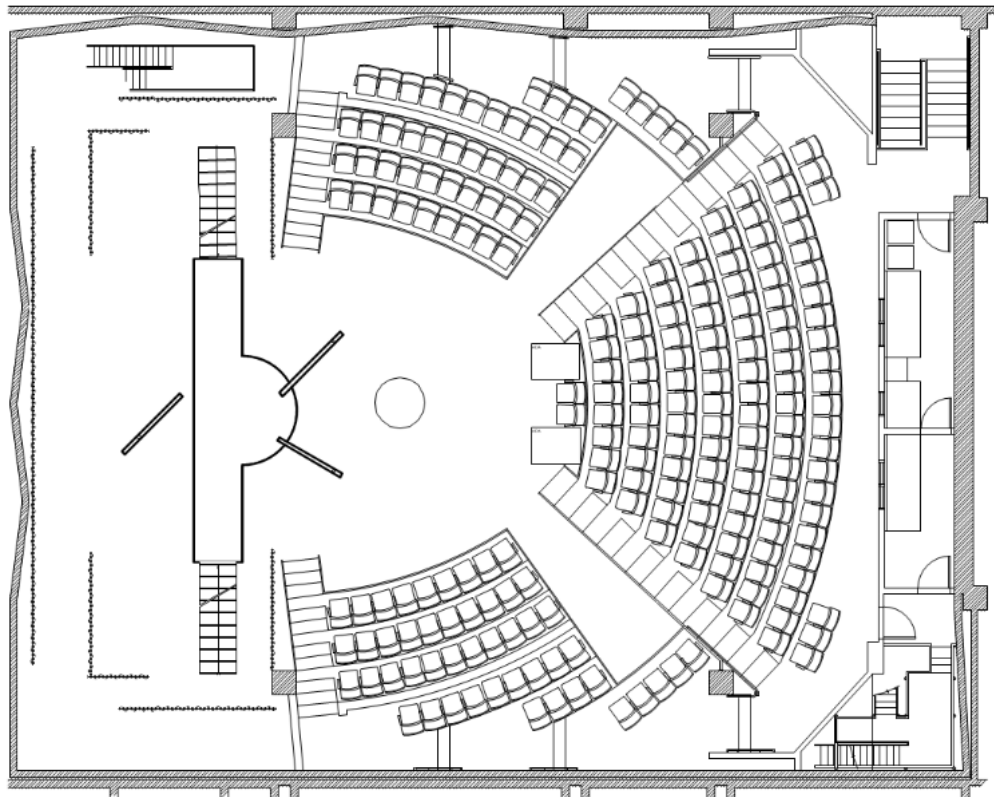


Figure 51: Redesigned Ground Plan

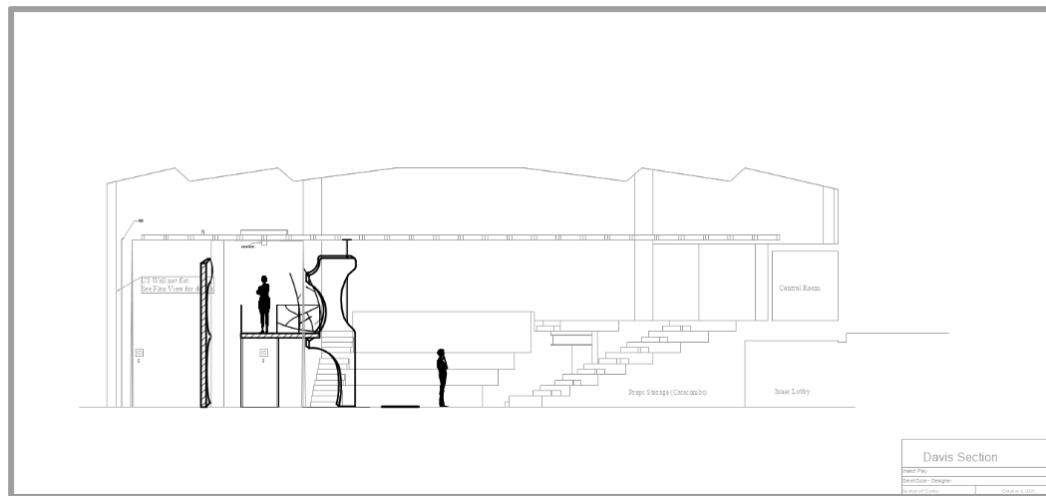


Figure 52: Redesign Section View

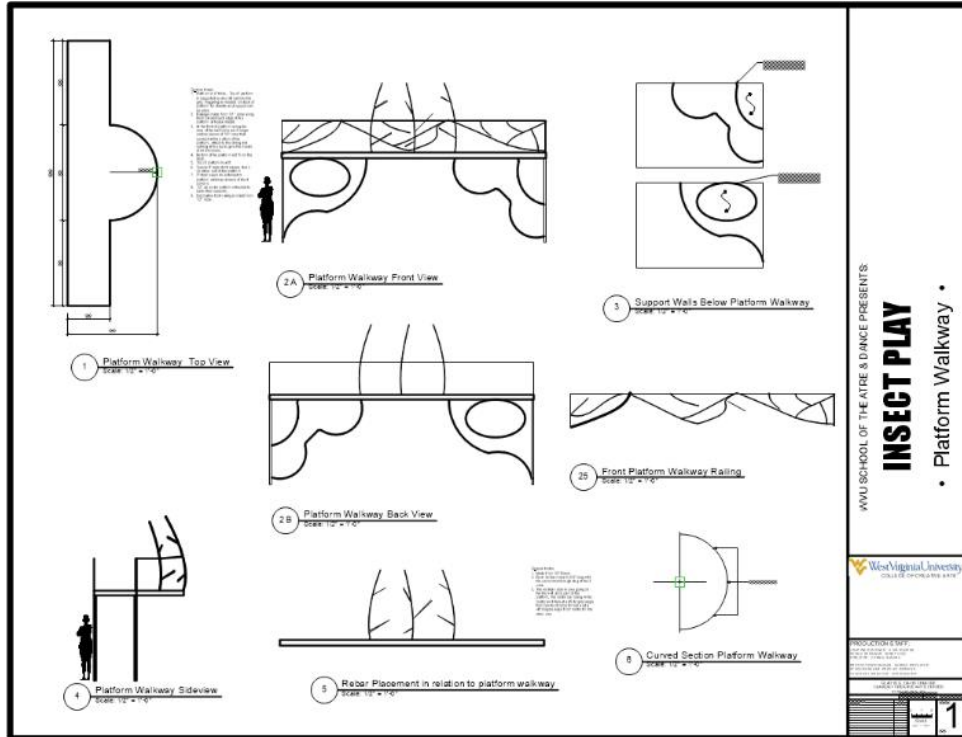


Figure 53: Redesign Bridge Platform Walkway

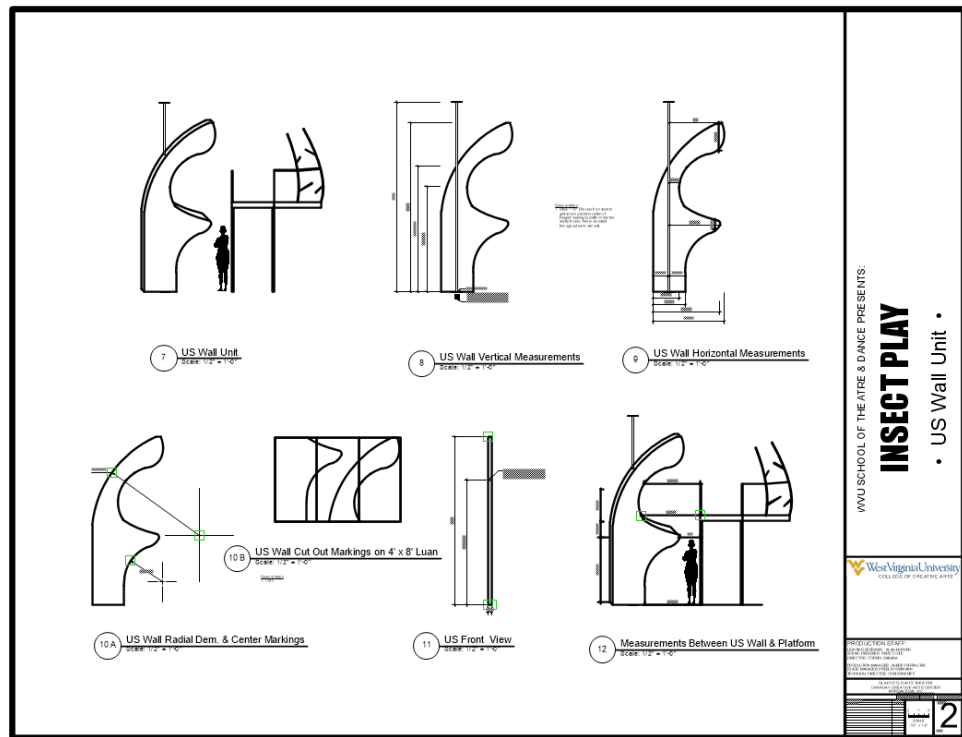


Figure 54: Redesign US Wall Unit

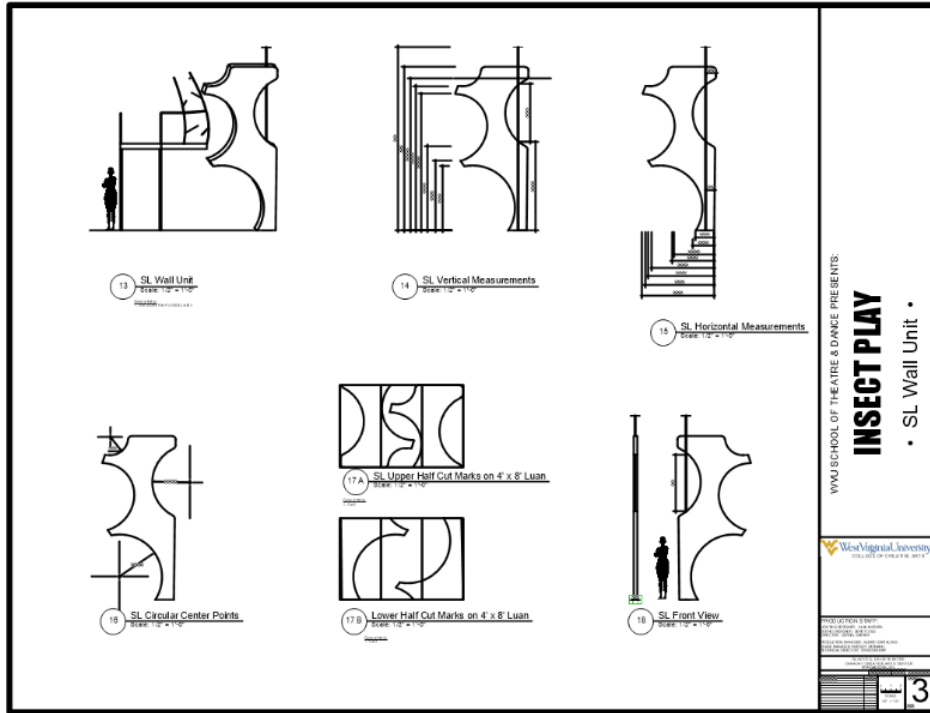


Figure 55: Redesign SL Wall Unit

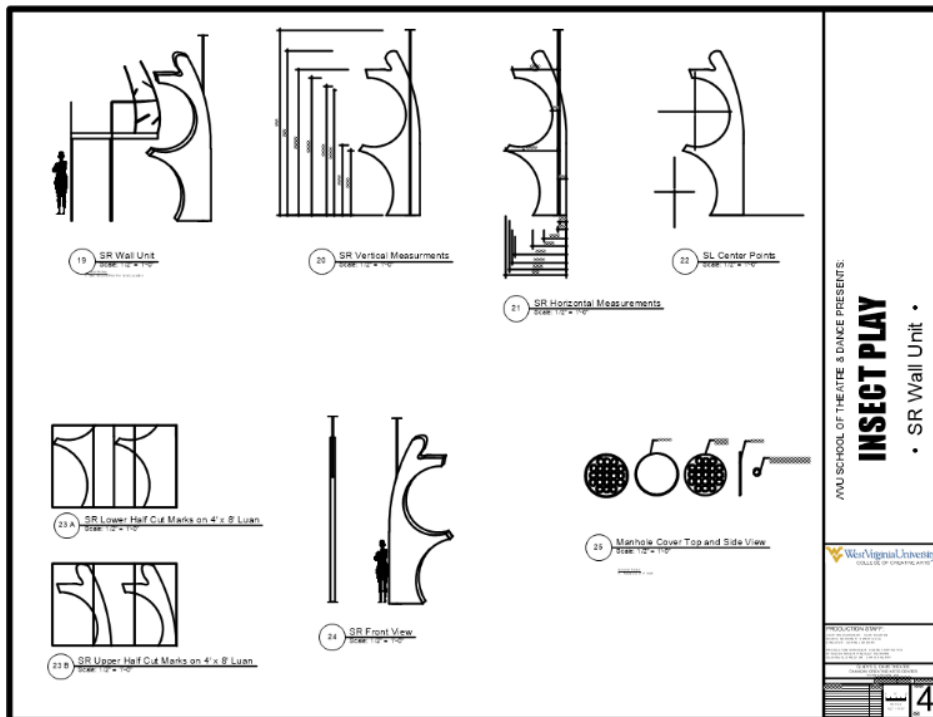


Figure 56: Redesign SR Wall Unit and Manhole



Figure 57: Redesign Front View Look A



Figure 58: Redesign Front View Look B

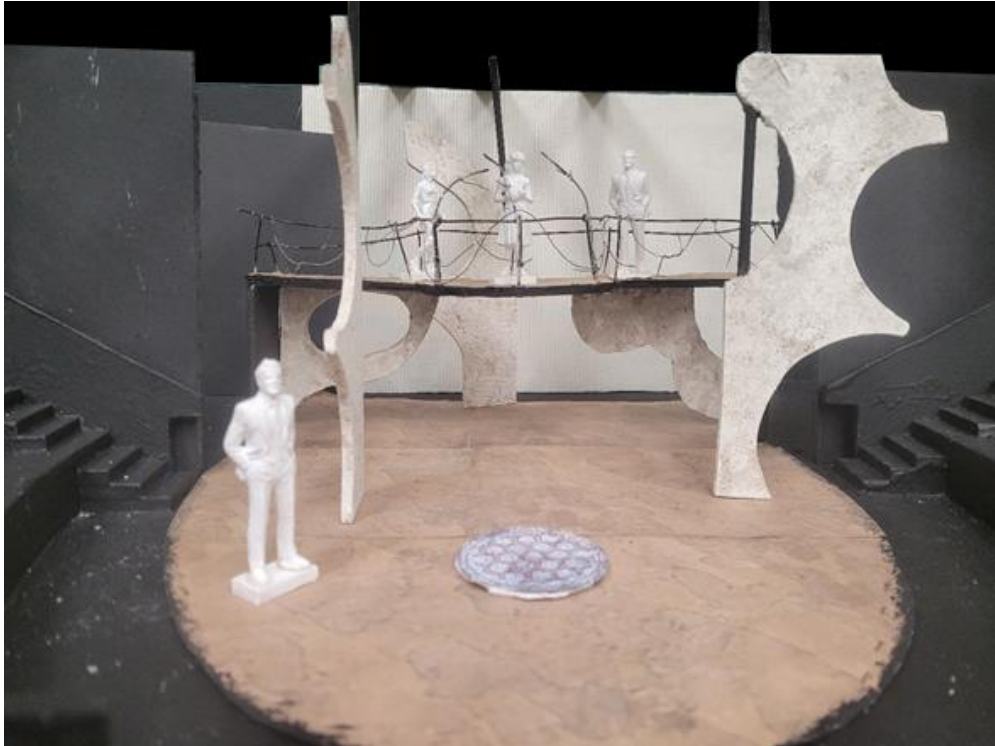


Figure 59: Redesign Front View Look C



Figure 60: Redesign Front View D



Figure 61: Redesign SL View



Figure 62: Redesign SR View

By the end of the week, I received confirmation through my technical director that the budget had been approved and this time the redesigned estimate was below budget. With this approval we set about the start of the building and painting process. However, shortly after a few rehearsals, the director asked if there was a way to get ladders that could be brought on and off stage, for actors to climb up to interact with the Chrysalis on the bridge balcony. I was concerned with the safety of the actors when climbing up and down in their characters shoes, so I sought the advice of Professor Neuenschwander. We discussed the possibility of building ladders that could be permanently attached to the bridge itself. This would also help with the upstage downstage stability.

I took this idea to Professor Gabara, and he agreed that it would be an innovative idea to have ladders permanently attached. I suggested that we could have four ladders, but we would have to see if the amount remaining in the scenic budget would permit it. I did another quick redesign that accounted for the addition of four ladders (Fig. 63-65) and sent it to Mr. Sheriff for budgeting.

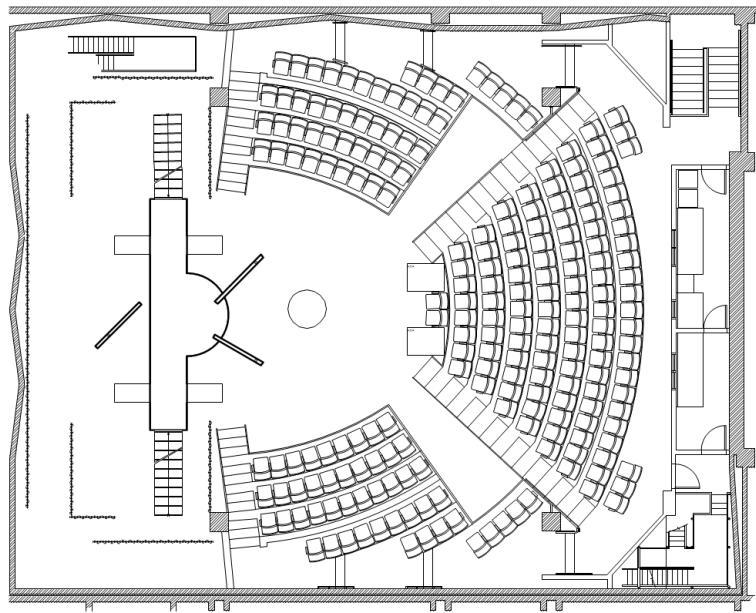


Figure 63: Redesign Ground Plan with 4 Ladders

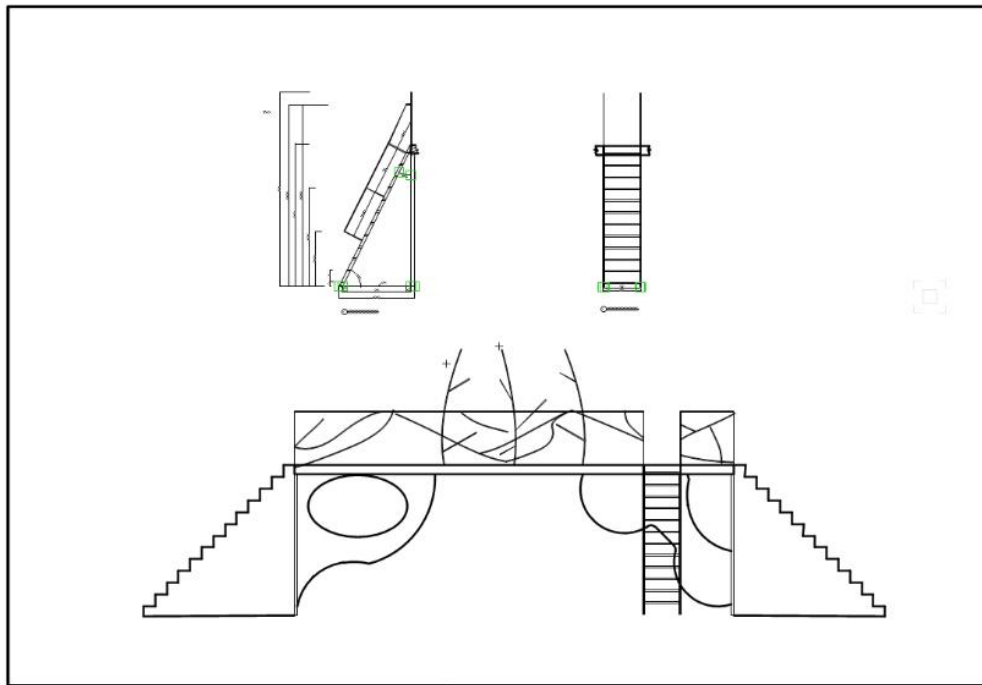


Figure 64: Redesign Front Elevation and Ladders

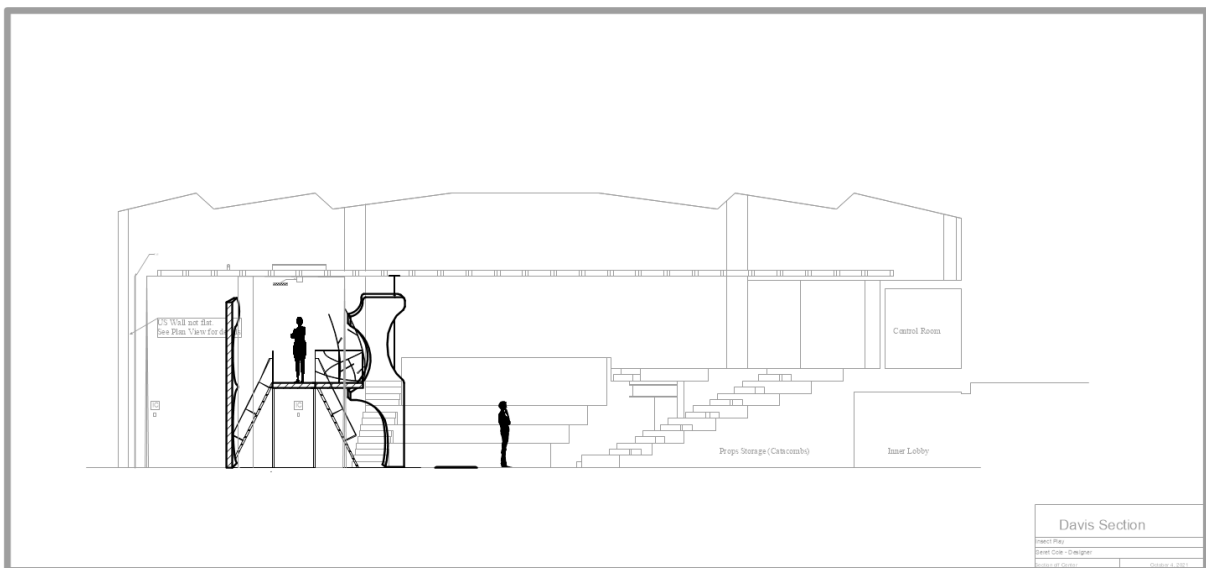


Figure 65: Redesign Section View with Ladders

The next day, I was informed that the remaining budget would only allow for a total of three ladders. I took this information to Professor Gabara, and together we decided that two ladders would be sufficient. I thought symmetrically the ladders would be best placed with one ladder on the downstage, stage right side and the other ladder on the upstage, stage left side. However, Professor Gabara, felt that the placement of the ladders would better serve the needs of the play if both were placed on the up and down, stage left sides of the bridge platform walkway. I passed this information on to the technical direction team and sent them a final ground plan with the newly established placement of the ladders, so the build process could begin (Fig. 66).

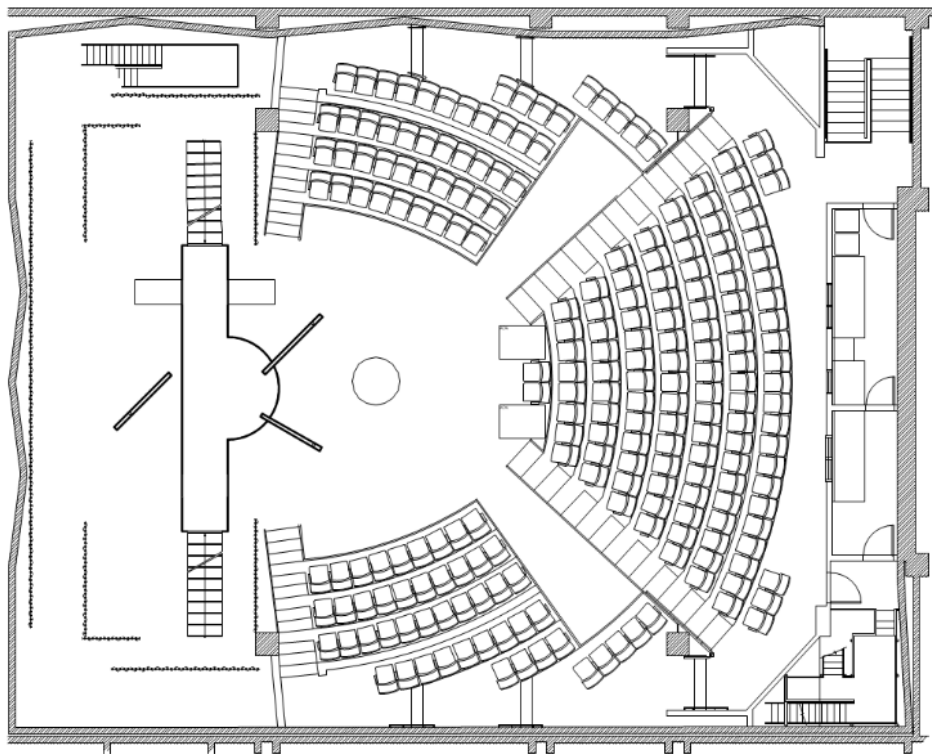


Figure 66: Final Redesign Ground Plan with 2 Ladder Placement

The Build and Paint Process

Mr. Sheriff and Mr. LoRicco divided up the build process into two parts, Mr. LoRicco focused on the building of the three wall units, while Mr. Sheriff focused on the building of the bridge and the metal working. Other than one small section of the downstage wall not wanting to assemble easily, the overall build went smoothly.

To build the wall units, Mr. LoRicco, with the help of work-study and lab students, laid out sheets of Luan and sketched out the shape of the walls (Fig. 67-68). Once the walls were sketched, they used the jigsaw to cut out the shapes (Fig. 69) and created a box steel frame that also housed the steel beam that would connect the wall from the deck to the grid, using a pillow block flange bearing which allowed the walls to then spin freely about the axis point. On each side of the steel frame one half of the lauan profile was attached and then bendy ply was used to join the two sides creating an organic wall (Fig. 70-71).

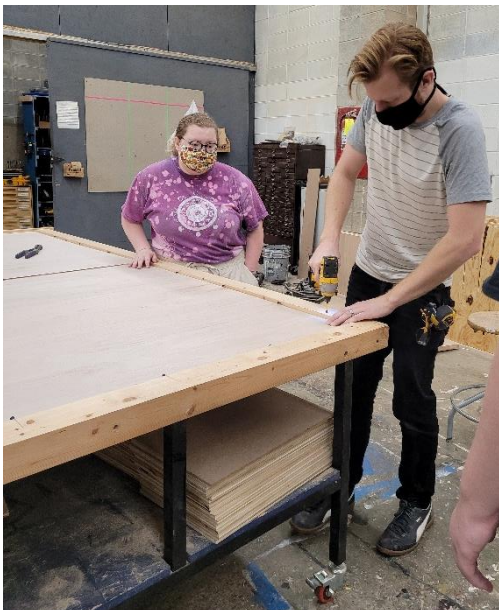


Figure 67: Assistant TD, Patrick LoRicco works with lab students to stable the Luan so the wall pattern could be sketched on



Figure 68: Luan arranged, and pattern sketched



Figure 69: Students work together to cut out wall unit with jigsaw

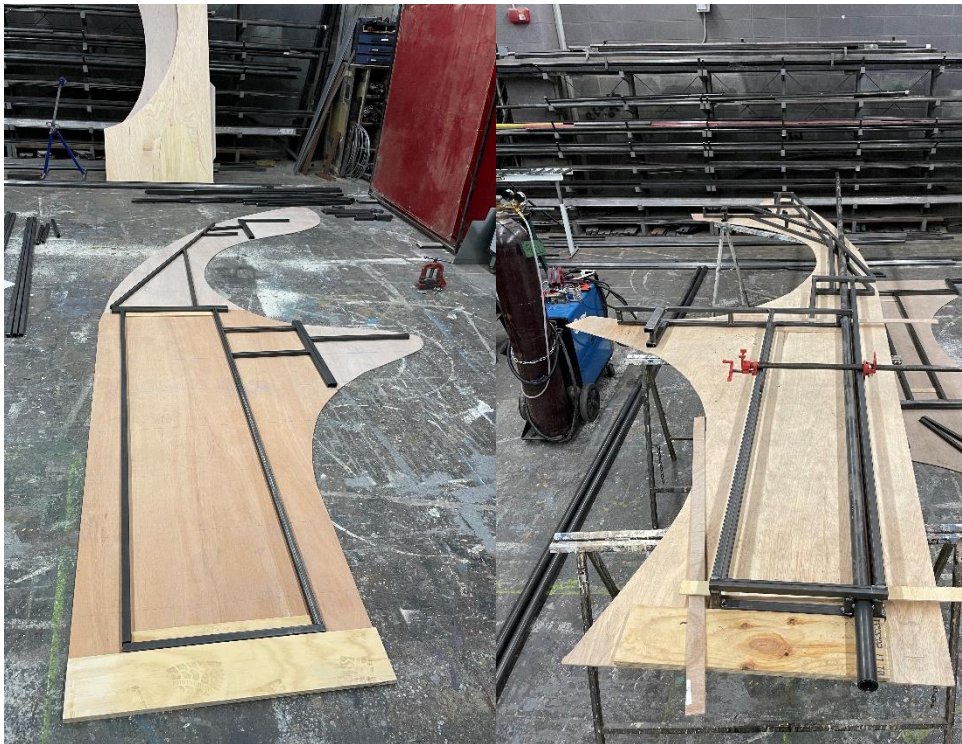


Figure 70: Steel framework and pipe are attached



Figure 71: Attaching the bending plywood

To build the bridge platform, Mr. Sheriff worked with work-study and lab students to manipulate and bend box steel (Fig. 72), and to cut out the CDX Plywood and MDF to the shape of the bridge. The CDX was cut and attached to the steel frame. Once that was completed the MDF was attached, and the edges were routed with a flush trim router bit. The MDF created a neat and smooth surface, allowing for a cleaner look. Mr. Sheriff worked with box steel to build the ladders and railings. Together with the assistance of Professor Steven Neuenschwander, Mr. Sheriff, work-study students, and myself worked to heat, bend, and attach the rebar to create the organic shapes that adorned the railing on both the bridge and the ladders (Fig. 73).



Figure 72: Technical Director, Mr. Christopher Sheriff works with work-study students to manipulate box steel to match the outline of the bridge balcony platform

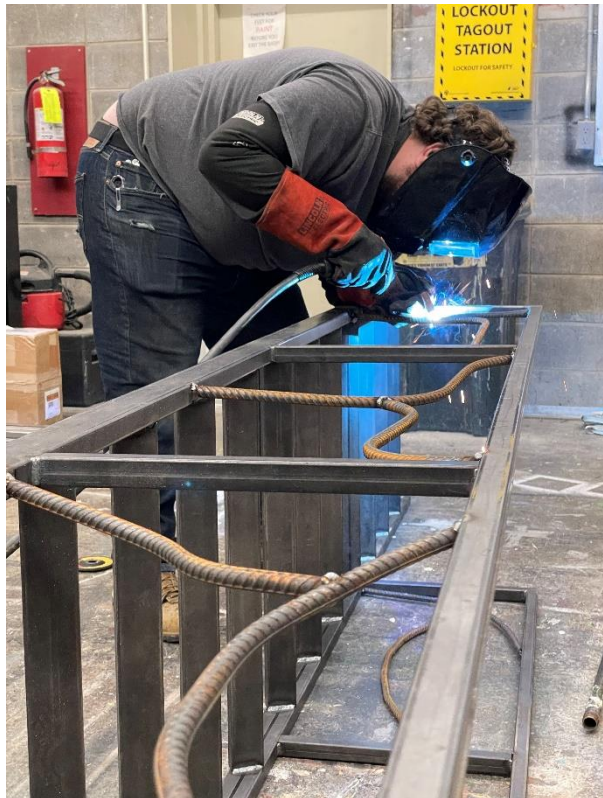


Figure 73: Technical Director, Mr. Christopher Sheriff welding the rebar to the steel

Fellow graduate student, Ms. Abigail Wagner, MFA Scenic Design, was tasked to serve as the Scenic Charge for this production. She would be responsible for recreating the paint looks for the wall units and floor treatment. I provided images of various paint treatments for her to replicate. She began by figuring out the exact paint colors needed and going to Sherwin Williams to pick them up. There was also some concern that certain paints would not be available due to shipping shortages caused by the Covid-19 pandemic.

We discussed how I created the paint treatment look for the model wall units and how it may be accomplished on a larger scale. I provided a picture of a fossilized bone (Fig. 74) for reference.



Figure 74: Fossilized Bone

Professor Steven Neuenschwander suggested that we try elastomeric roof coating in patches to create the desired texture of the walls. Miss Wagner obtained the roof coating and created several different sample boards with varying techniques of application to determine the best way to apply it to create the desired look. In the end she found that sponging it on in varying degrees of thickness and allowing it to dry completely before painting gave us the look and texture that was needed (Fig. 75). Occasionally, a second or third coat was applied to areas that flattened out too

much. The paint was then sponged on in layers of colors which added to the depth and texture of the unit (Fig. 76). The tables, chairs, and stools used for Act One with the butterflies were also painted to mimic the bone paint treatment (Fig. 77) but without the use of the elastomeric layer.



Figure 75: Wall coated in elastomeric



Figure 76: Finished wall treatment



Figure 77: Table, chairs, and stools with bone paint treatment

For the floor treatment, I decided that the scale of the bone smear was too large and busy. On a hike I found a river rock that had the look and feel that I wanted (Fig. 78). It also resembled the overall shapes of the bone smear (Fig. 19) and the ant's nest (Fig. 20), but in a more subtle fashion. Ms. Wagner and I discussed the best way to execute the new



Figure 78: River rock

floor treatment and we worked together to choose the varying shades and degrees of brown that would make up the final floor treatment. To accomplish this, Ms. Wagner created a scumble coat base (Fig. 79) and then she went back and sketched out the organic shapes with pencil that would make up the floor. Lab students placed a line of sawdust over the pencil line (Fig. 80), and then using a Hudson Sprayer Miss Wagner sprayed on watered-down paint in the varying shades across the floor to create the final look (Fig. 81).



Figure 79: Scumble coat



Figure 80: Lab students work to create the organic floor shapes



Figure 81: Final paint treatment

The railing was painted black to help it fade away and be less visually distracting. The rebar was also cleaned and painted to avoid any rust or other imperfections from coming off onto the actor's hands. I provided a picture of the rebar for Ms. Wagner to pull from to create the desired effect (Fig. 82).



Figure 82: Rebar

The major prop for this show was the dungball itself. Initially, we wanted the dungball to be very large so that the actor's couldn't see each other around it. We also wanted it to be lightweight, so they could manipulate it easily. Professor Gabara and I discussed how Mr. Beetle was like a wolf on Wall Street and isn't afraid to do whatever he needs to do, including running people over, if they stand in the way of his ability to earn capital. Using this idea, I decided to add a foot and a hand coming out of the ball to reflect this and his hunger for more. Professor Gabara and I discussed that the look should be a dirty gold and the texture should reflect that of an actual dung-ball.

I researched the dungballs and found some photos on the San Diego Zoo website that provided excellent detail on the coloration and texture of a dungball. (Fig. 83). My next step was to figure out what to use for the base of the ball, that would be light enough to manipulate and strong enough to hold its shape throughout the run. Unfortunately, after doing some measurements of the Davis and the



Figure 83: Dung--Beetle with Dung-Ball; Photo Credit: San Diego Zoo

distances between elements within the set, the initial size of the ball had to be reduced.

After some research and discussion with Professor Mary McClung and my mother, on the possibility of using either a weather balloon or an exercise ball, I settled on the largest size of exercise ball that I could find, 95cm. I choose to order an extra thick, professional grade ball that

was anti-burst tested to support up to 2200 pounds, and at the same time, I ordered a realistic looking hand and foot (Fig. 84).



Figure 84: Exercise Ball, Realistic Hand, and Foot

When I received the ball, hand and foot, I inflated the ball and had my stage properties class students begin gluing on strips of muslin using watered down wood glue. Then we attached the hand and the foot to the ball securing them with contact cement and gluing more strips of muslin around them (Fig. 85).



Figure 85: Wrapping the exercise ball in muslin and attaching the hand and foot

After that dried, myself, the stage properties class and lab students worked to cut and glue strips of burlap to the ball in the same manner as before (Fig. 86). We noticed that as the glued burlap dried, the edges became sharp, so we file those off carefully with a rasp tool. Once the burlap was in place and the glue was dry, I added a layer of the elastomeric to help coat the burlap and bond all of the pieces



Figure 86: Gluing on the strips of burlap

together (Fig. 87). Once this was fully set, the actors were then able to start working with the dungball in rehearsal (Fig. 88). I discussed with the stage management team about the possibility of sharp edges on the ball. I discovered that the edges seemed to soften up the more the ball was rolled around on the ground, and the more brittle pieces broke off naturally. Finally, I painted the dung-ball using black, brown, copper and gold spray paint (Fig. 89).



Figure 87: Coating with Elastomeric



Figure 88: Actors working with the dungball



Figure 89: Dungball's final look

Before load-in, the bridge unit was assembled in the shop using platforms underneath for structural support. The staircases were attached on either end. The two stage right ladders were also welded on. Once the ladders were attached to the unit, it was disassembled and then reassembled in the space during load-in (Fig. 90).

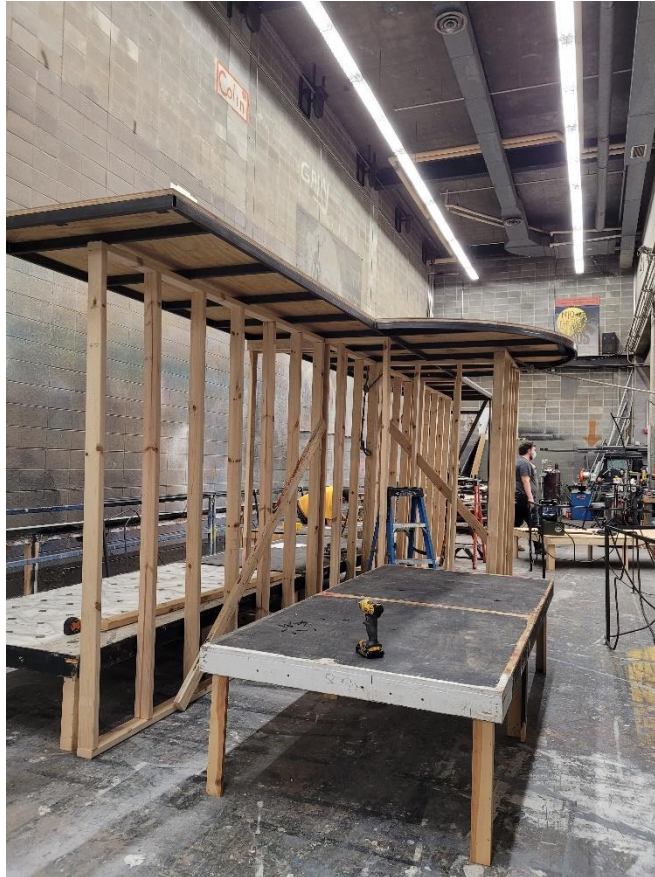


Figure 90: Assembling the bridge to attach staircases and ladders

The Load-In Process

The bridge unit was loaded into the theatre and reassembled first. Aircraft cable was used to tie the structure from various points along the bridge into the grid. These cables were intended

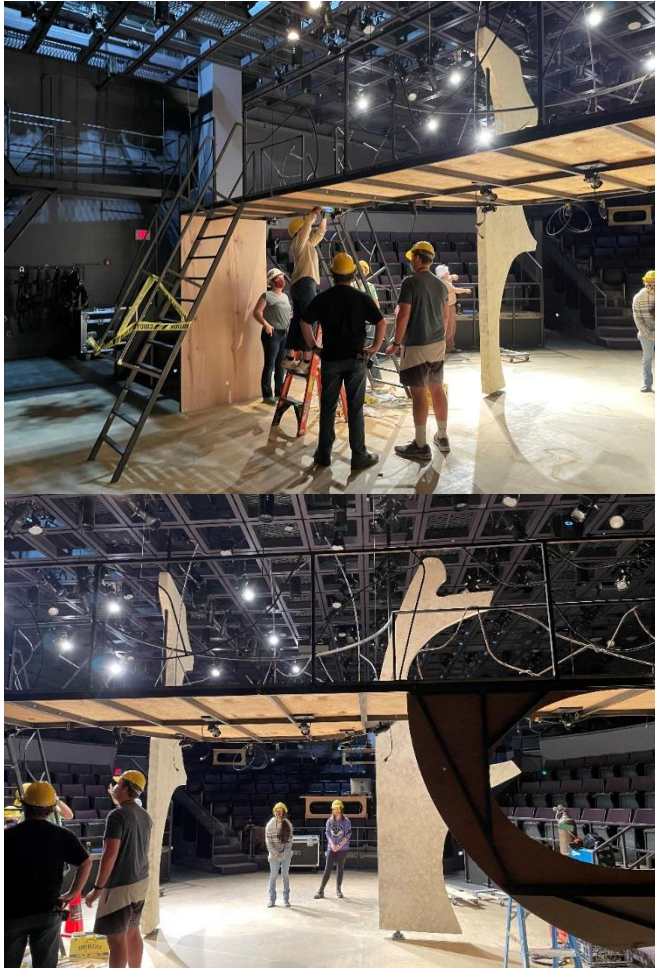


Figure 91: Loading in of the bridge and wall units

to offer added structural support. Once the bridge was secured and structurally sound, the wall units were brought in. The steel beam that ran through them was connected to a pillow block flange in the grid and to one on the floor (Fig. 91). Once all the walls were in place, they were tested to make sure they could rotate. It was discovered that the upstage wall unit could only go 180 degrees. If one tried to make it go the full 360 degrees, it would connect with an aircraft cable. The downstage walls also failed to go the full 360 degrees as well. Due to a minor error in construction, the stage left wall unit needed to be adjusted at the top so that both downstage units

could meet cleanly in the middle and rotate fully. The three upward rebar protrusions on the bridge's balcony would also need to be bent further upstage to allow for clearance. Once these matters were handled, the downstage wall units functioned as expected. The lack of full rotation in the upstage wall unit was communicated to the stage management team and the director. Lastly, the manhole had been sent to engineering to be laser cut but was delivered very last

minute. The manhole was then placed and secured, the ladders were anchored, and the masking was hung to help create the completed look (Fig. 92). After the first dress rehearsal, it was



Figure 92: Finished look

discovered that the Engineering department had cut the manhole incorrectly. Mr. Sheriff removed the manhole, corrected the error by cutting it smaller and reinstalled it.

The Technical Rehearsal Process

The technical rehearsal process started on Thursday, November 11 with a crew view. This allowed crew members a chance to see the action of the play, the transitions, the stage properties, and the costuming demands of the show. Introductions were made and the Covid-19 show run and testing policies were discussed. Since we were still under pandemic conditions, the cast and crew were tasked with severely limiting their interactions with others outside our theatrical bubble. We were also asked to be tested anywhere between one and three times a week, depending upon one's show duties and responsibilities. Masks were worn all the way up until the final dress by the actors, but the crew was required to continue to wear them through the run.

Tech week is configured so that the first few days focus on the more technical aspects of the show such as lighting and sound. This is also a time where actors may be introduced to any final properties and set pieces. There was some hesitation from the actors regarding the stability of the bridge, but once they were reassured and had a chance to move about the stage and interact with everything, they felt more comfortable.

By the middle of the tech week, costumes, make-up, and any wigs are introduced so that actors and crew can work through any quick changes and become accustomed to the amount of time it takes to get ready. This is also a chance to make discoveries such as costumes not fitting properly, wigs not being put on properly, and for any alterations and adjustments. It is also a time to discover how the costume can affect the movement of an actor and their spatial relationship with the scenery around them.

This tech week was one of the smoothest tech weeks that I have had the pleasure to be part of. Other than some minor adaptations and paint treatment touch-ups. The scenery functioned as expected, and any missing properties, costumes, wigs, and make-up were all in place by the preview show held on the following Thursday, November 18.

The show opened on Friday, November 19; however, the run was interrupted by the university's Thanksgiving holiday break. The show's runs resumed on Tuesday, Nov 30 and ran until the following Sunday, December 5 with strike immediately following the closing performance.

Part IV: Conclusion

Production Review

This show was one that I was particularly excited to work on. The previous semester, I was tasked with creating the costume looks for the show for a project in my Costume Design 1 class. I recall reading it for the class and stating that this would be a show that I would like to design one day. So, when I found out that it was on our calendar to produce, I jumped at the chance to design it. I especially enjoyed researching the background history of the brothers and learning about the events that transpired around them, as one could see the effects of world-war-1 and the societal demands of the time being transpired in the play's subtext.

Despite the difficulty at first with finding the connection between the human and the insect world, once I found it, it was like an inspirational flood gate had opened. I begin looking at things from different angles and finding connections that otherwise went unnoticed. I think that the ability to look at something from a different perspective, as well as the ability to have the flexibility to back up and come at a problem from a different approach is an especially important skillset to have for a designer.

To me, designing is like solving a puzzle. The script is the puzzle box and every component that makes up the production, from the text to the technical elements, creates the pieces spread out before me to interlock together. Everyone's approach to solving a puzzle is different. I prefer to build the framing foundation first, and then work through the puzzle one section at a time. The same is true for my set design. I found that approaching the design in a systematic, puzzle solving fashion enabled me to make quick decisions and adjustments more readily as needed along the way.

Overall, I think the production from design to conception went very well. I was disappointed that my original design had to be adjusted due to budgetary constraints, but as I said before, I learned incredibly early not to get married to an idea, so I approached the redesign as an opportunity to come at it again with fresh eyes. I feel that while my initial design had more of the elements and features that both Professor Gabara and I wanted, the redesign still served the purposes and needs of the text and the action. My only regret is that the redesigned walls weren't utilized as frequently as I had initially hoped.

While the paint treatments weren't very complex, the execution created fun challenges that were easily solved by Ms. Wagner. I felt that her idea of using sawdust and watered-down paint for the floor was an interesting approach to recreating the look and texture of the floor in a surprisingly quick and easy fashion. The wall treatment was perhaps the biggest paints challenge, which Ms. Wagner solved with a little bit of trial and error on sample boards to get the desired look and feel. I felt confident that the coloration of the set was in very capable hands, which freed me up to tackle other necessary properties and scenic tasks.

Mr. Sheriff and Mr. LoRicco were both excellent to work with. They communicated any design questions and/or complications without hesitation and worked together to tackle the scenic challenges of the set. Going into the build, I knew that Mr. Sheriff enjoyed and excelled in welding, so I felt that the intricacies of the rebar and steel were in very capable hands.

Professor McClung's costuming for the snails provided a design challenge because of the overall shape and size of the costume itself. I had to ensure that the tops of their shells wouldn't get stuck on the bridge platform. During a discussion between myself, Professor McClung, and Professor Gabara regarding this, Professor Gabara expressed that he wanted the actors to work and felt that the size of the costumes and the height of the bridge platform would allow for more

creative movement from the actors. As a result of the final design, the two actors playing the snails had to bend down slightly to account for the size of their costumes which did allow for some creativity in movement.

The organic nature of the set was further enhanced by the various gobos and lighting designs of Professor McEwen. For the Butterflies, he created a colorful undulating floor that complemented the club sounds as designed by Ms. Alexis Allenbaugh. His choices in coloration and textured gobos on the cyclorama (“cyc”) really added to the overall aesthetic of the production. I was very happy with the overall look and feel of the lighting.

Prior to entering grad school, I had very little scenic design experience, especially with regards to drafting. As part of my academic requirements, I successfully completed a hand-drafting and computer drafting (Vectorworks) course, and then Covid hit, and things were shut down. As a result, shows were also canceled, so I had limited working knowledge of drafting going into this project. As a result, mistakes were made and learned from. I am confident that the more I do, the better I will get. Regardless, I enjoyed the challenge that my inexperience in design brought.

In conclusion, I feel that this was a very positive learning experience for everyone involved. I was pleased with the communication amongst the design team and the teamwork that was displayed throughout the shop from everyone. I feel that the only true negative was the injury of our shop supervisor during load-in, but I am thankful that he is okay, and everything worked out in the end.

Appendix A: Production Photos



Prologue



Prologue with Lepidopterist



Act One - Butterflies



Act Two - Dung Beetles



Act Two - Ichneumon Fly and Larva



Act Two - Mr. & Mrs. Cricket



Act Two - Parasite



End of Act Two



Chrysalis



Act Three - Ants



Epilogue - Mayflies

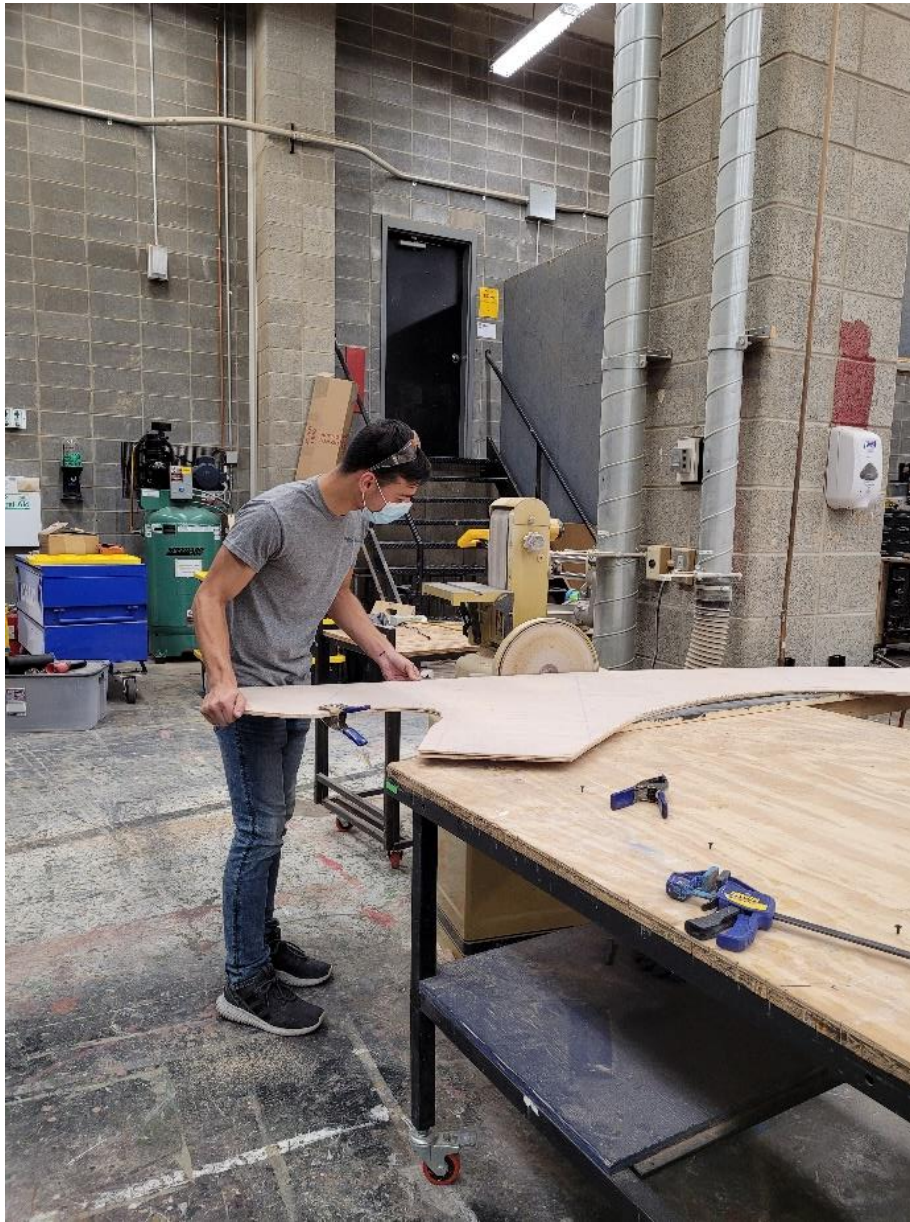


Epilogue - The Chrysalis is born



Epilogue - The Snails and death of the Traveller

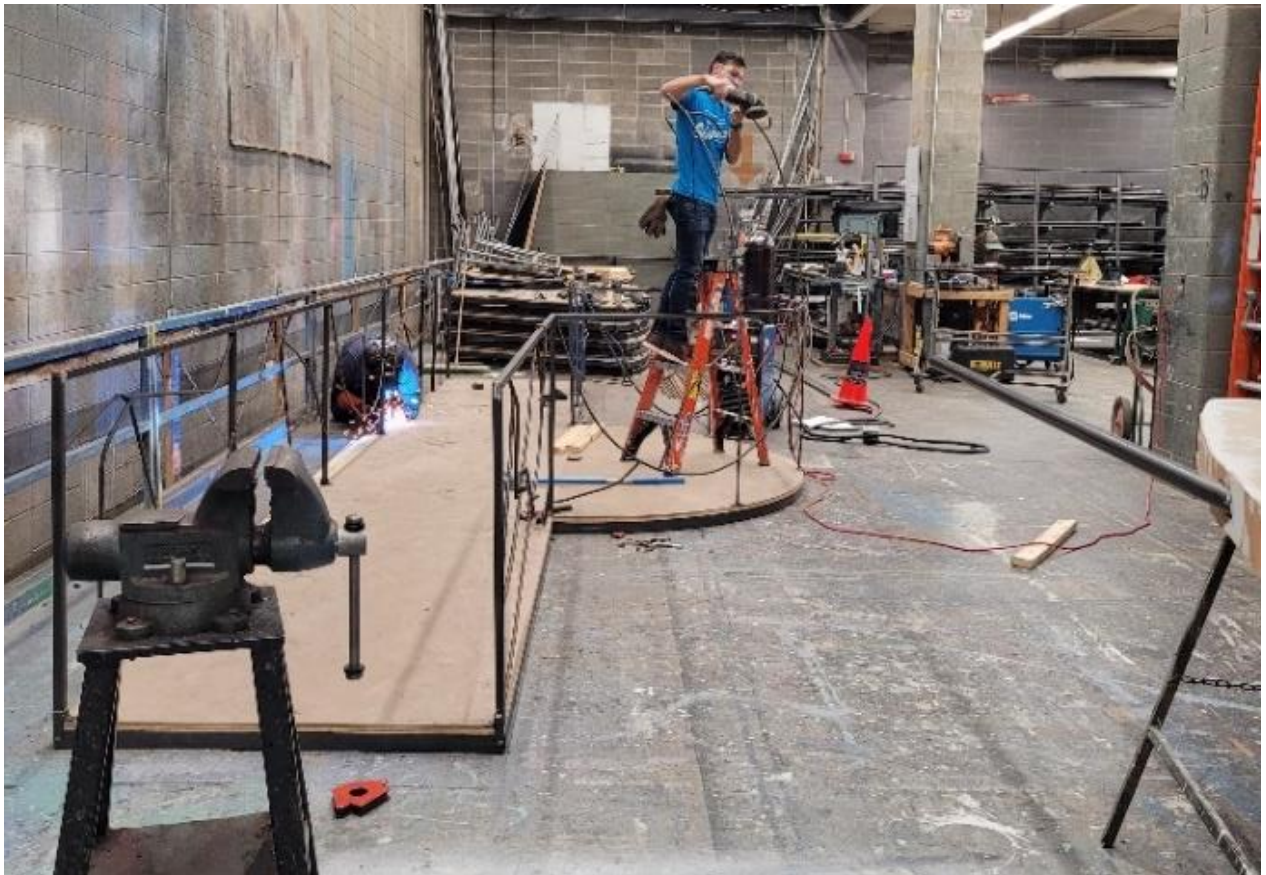
Appendix B: Build Photos



A work-study inspects to ensure the edges lineup



An opening cut into the bending plywood to allow for the steel beam



Mr. Sheriff welds the rebar to the steel, while a work-study student sands down any rough edges



A work-study student inspects to ensure there are no sharp edges



Figure 81: Intricate organic twist

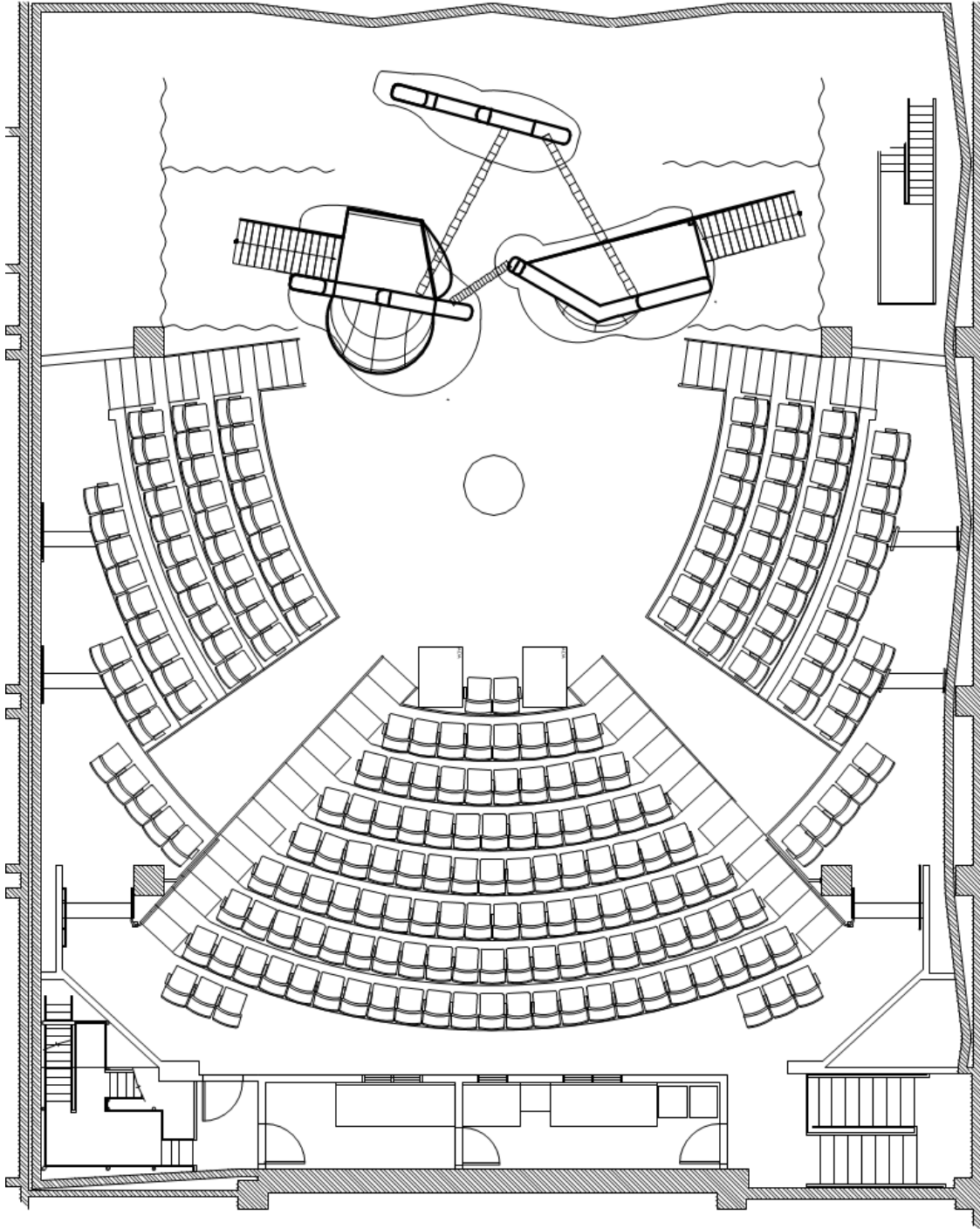


Figure78: Organic twist of the rebar

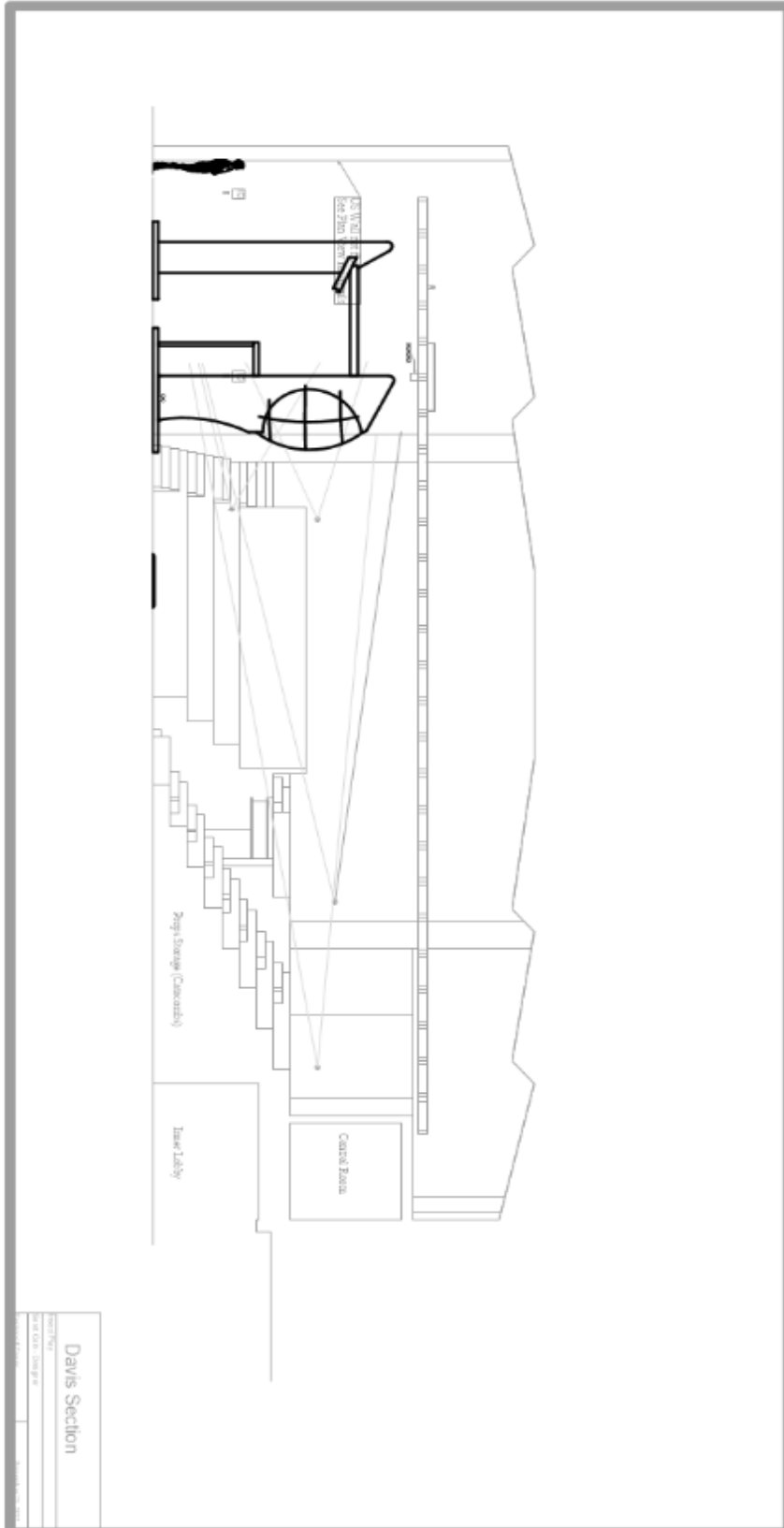


Figure 82: Bridge platform walkway with completed organic rebar treatment

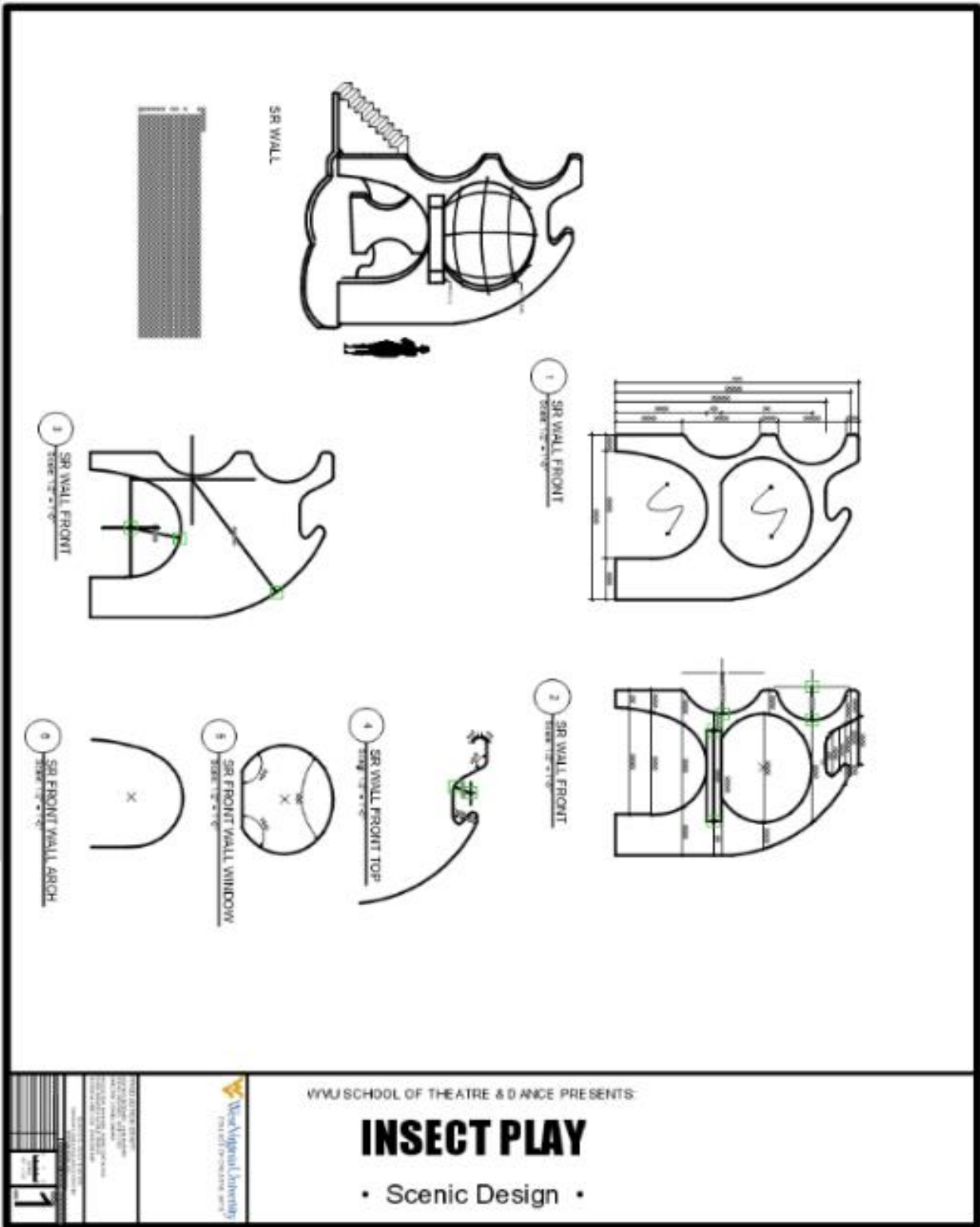
Appendix C: Drafting Plates



Ground Plan



Section View from Center Line



SR Wall Unit Front View

SR WALL UNIT BACK VIEW

7 Front Wall Side Balcony View with Detail

8 Balcony Front View

9 SR Wall Back View with Platform

10 SR Wall Back View with Platform

11 SR Back Custom Top View

12 SR Back Platform Front View

13 SR Back Platform Support Wall

14 SR Back Platform Side View

15 SR Back Platform Support Wall

16 SR Back Platform Side View

WVU SCHOOL OF THEATRE & DANCE PRESENTS:

INSECT PLAY

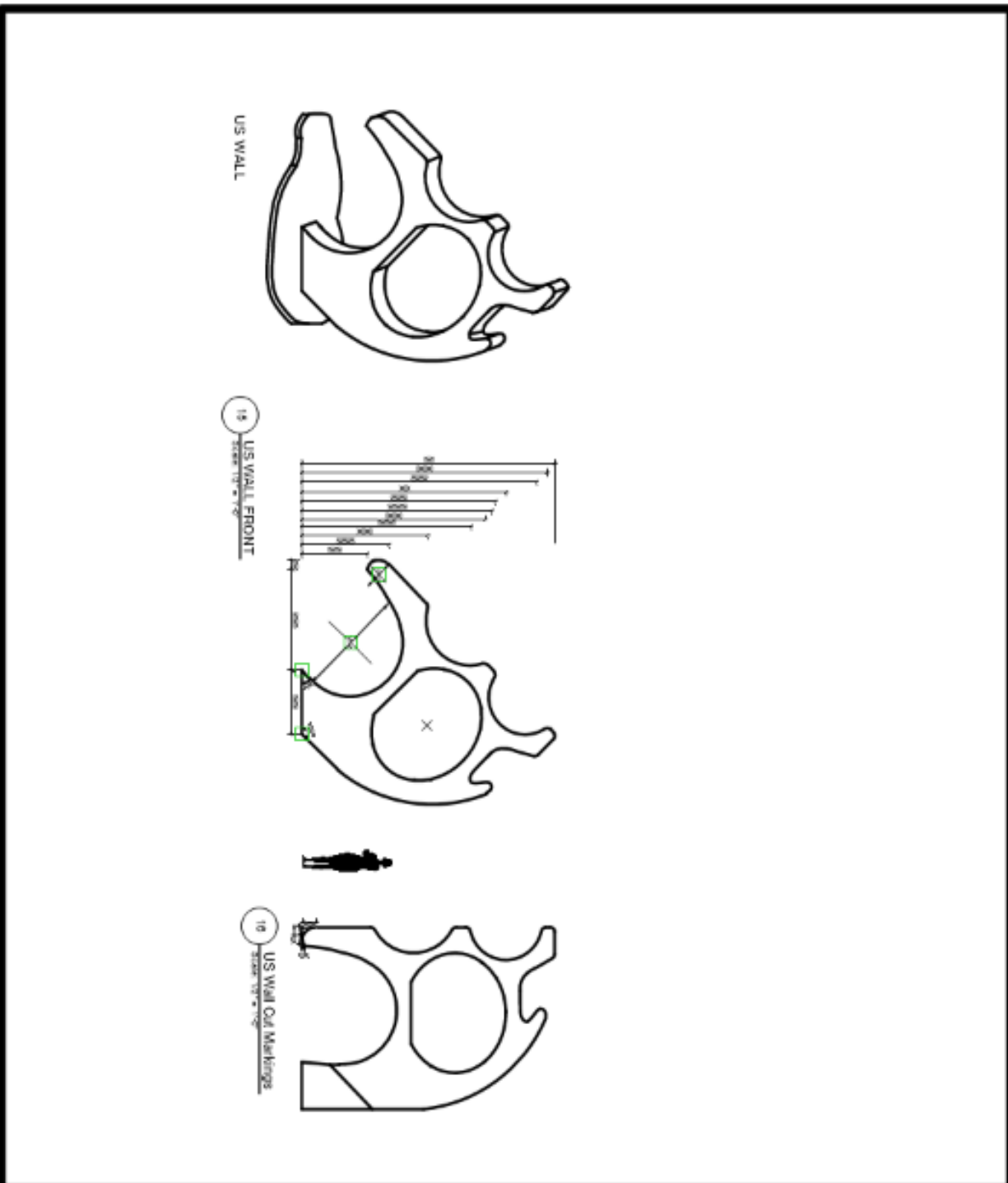
• Scenic Design •

West Virginia University
SCHOOL OF THEATRE & DANCE

PRODUCTION DESIGNER: [Name]
SCENIC DESIGNER: [Name]
COSTUME DESIGNER: [Name]
HAIR & MAKEUP DESIGNER: [Name]
LIGHTING DESIGNER: [Name]
SOUND DESIGNER: [Name]
PROPERTY MASTER: [Name]
CATERING & BEVERAGE: [Name]
TECHNICAL SUPPORT: [Name]

2

SR Wall Unit Back View



WEST VIRGINIA UNIVERSITY
SCHOOL OF THEATRE & DANCE
COLLEGE OF CREATIVE ARTS

WEST VIRGINIA UNIVERSITY
SCHOOL OF THEATRE & DANCE PRESENTS:

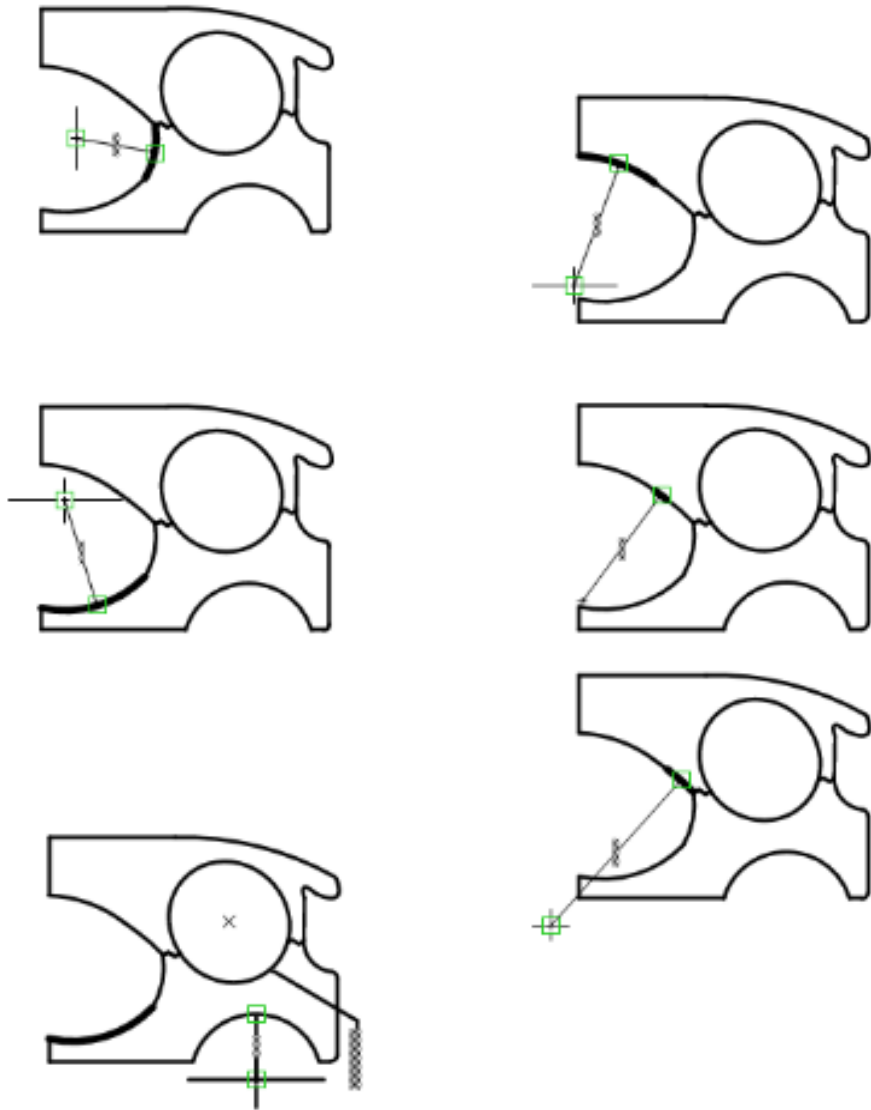
INSECT PLAY

• Scenic Design •

WEST VIRGINIA UNIVERSITY
SCHOOL OF THEATRE & DANCE
COLLEGE OF CREATIVE ARTS

US Wall Unit

SL Arch Radial Measurements



WVU SCHOOL OF THEATRE & DANCE PRESENTS:

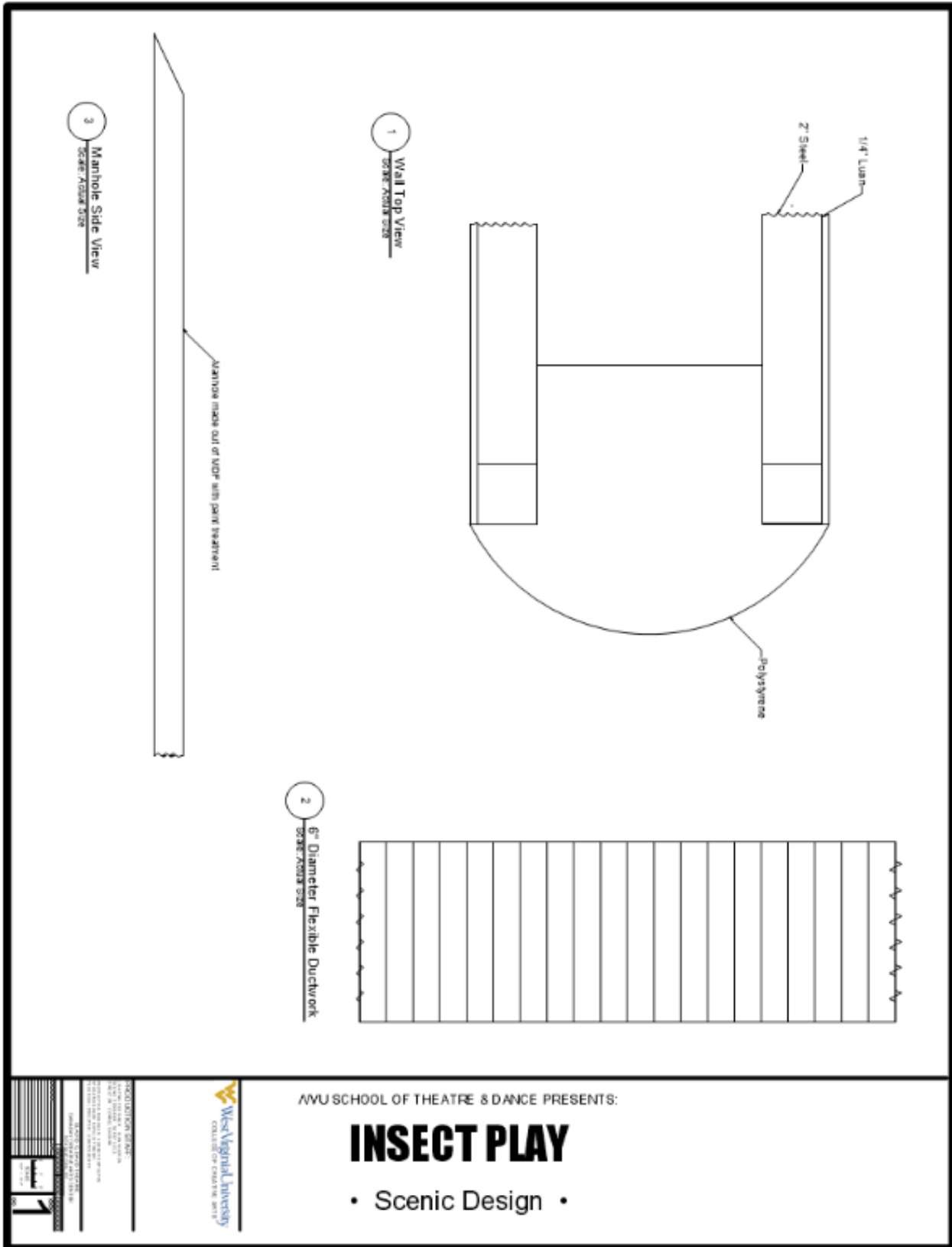
INSECT PLAY

• Scenic Design •

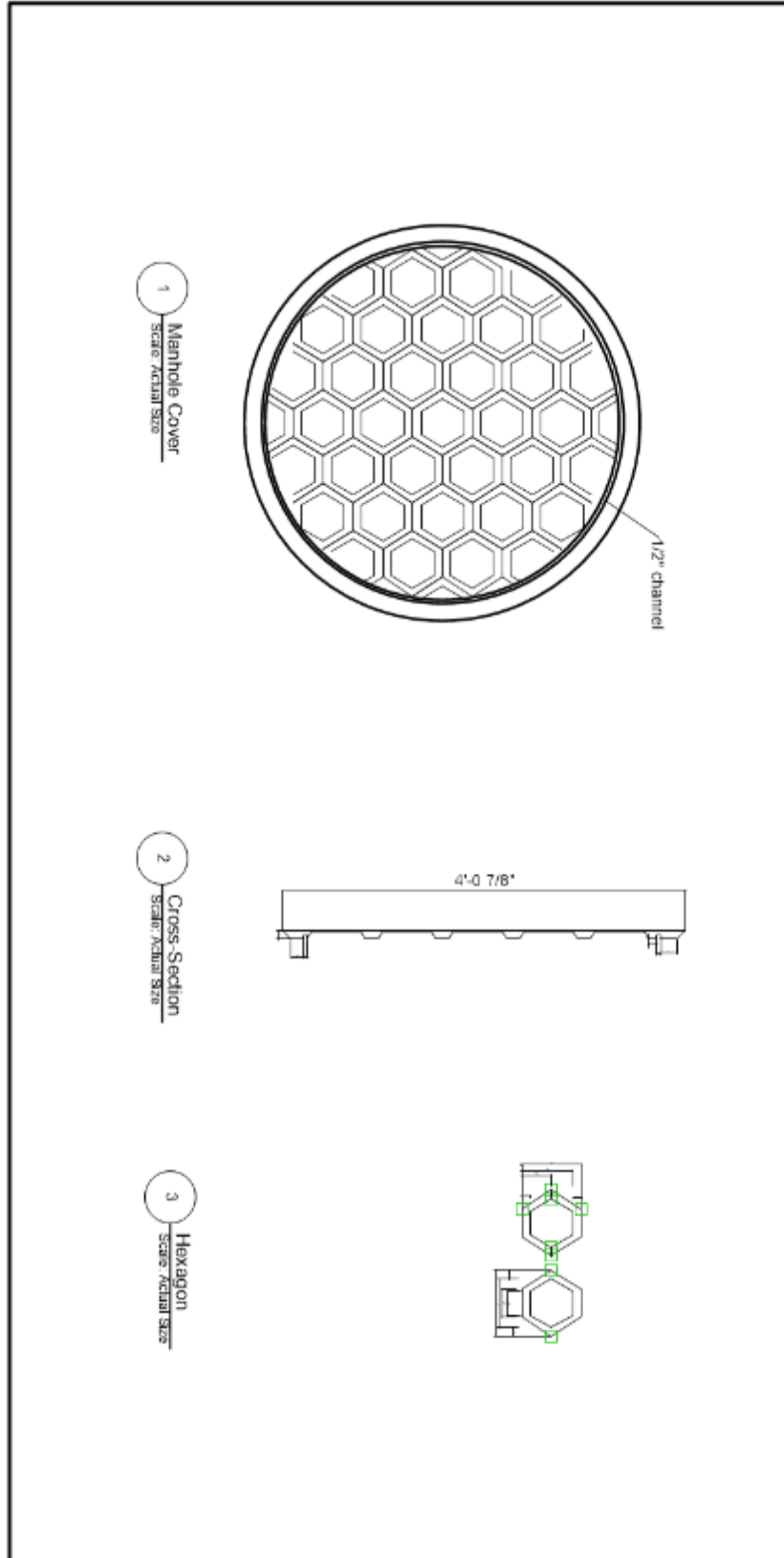
West Virginia University
ONLINE PRODUCTION ARTS

PRODUCTION TEAM
DIRECTOR OF PRODUCTIONS
DESIGNER
SCENIC DESIGNER
LIGHTING DESIGNER
SOUND DESIGNER
COSTUME DESIGNER
HAIR AND MAKEUP DESIGNER
PRODUCTION MANAGER
PRODUCTION ASSISTANT

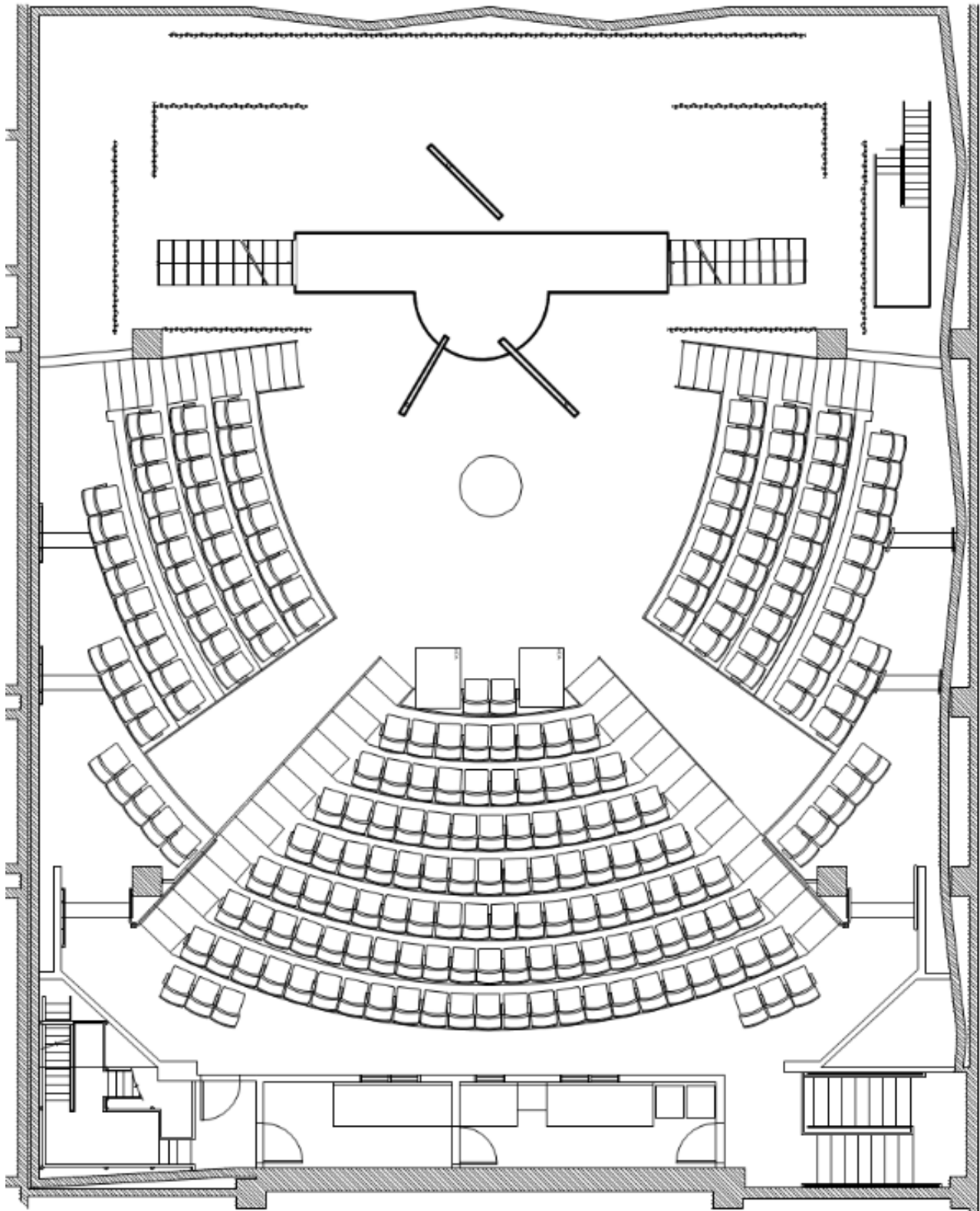
5



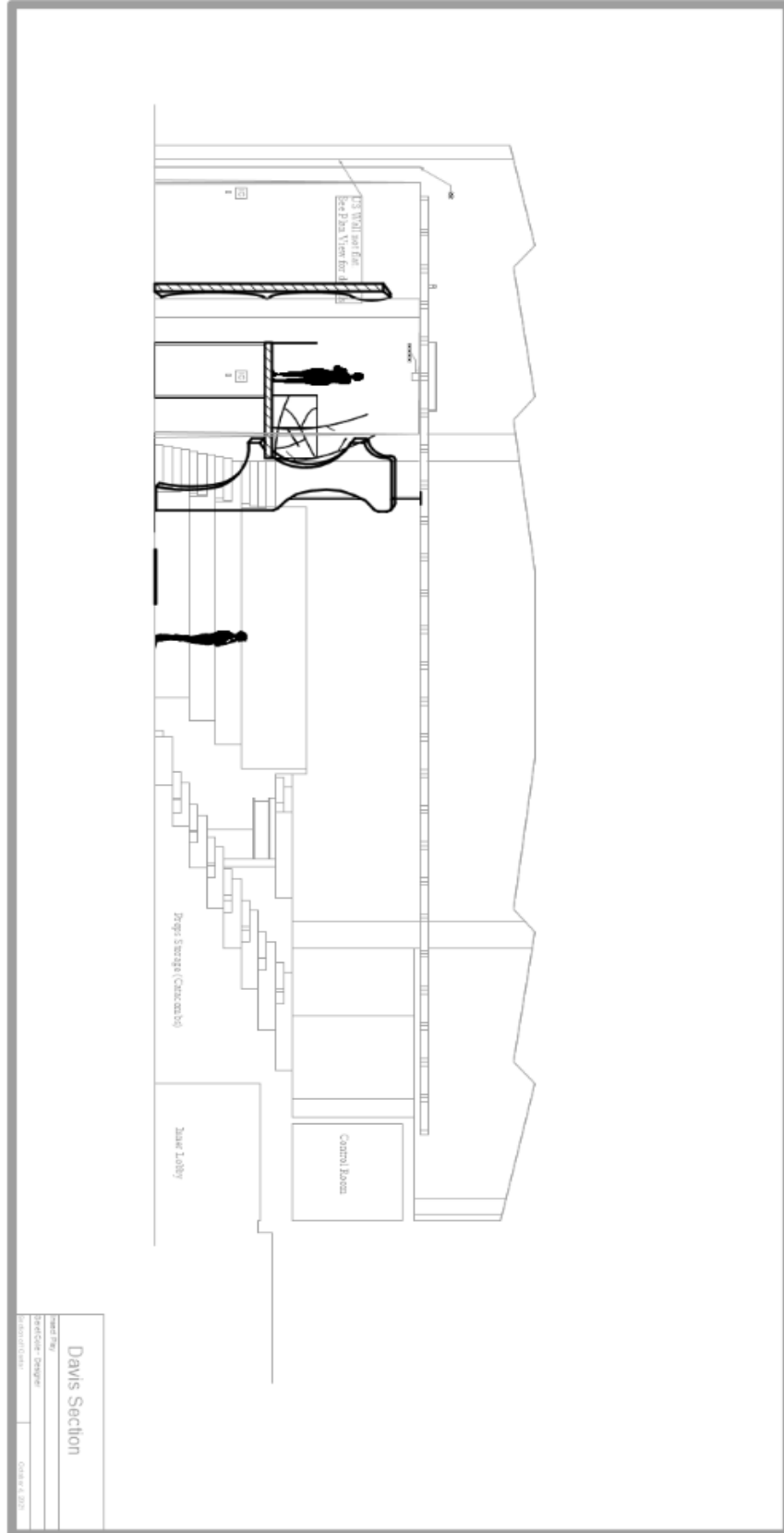
Section of Wall Unit, Ductwork, and Manhole



Manhole Elevations



Redesign Ground Plan



Redesign Section View

1 Platform Walkway Top View
Scale: 1/8" = 1'-0"

2A Platform Walkway Front View
Scale: 1/8" = 1'-0"

2B Platform Walkway Back View
Scale: 1/8" = 1'-0"

3 Support Walls Below Platform Walkway
Scale: 1/8" = 1'-0"

4 Platform Walkway Sideview
Scale: 1/8" = 1'-0"

5 Rear Placement in relation to platform walkway
Scale: 1/8" = 1'-0"

6 Curved Section Platform Walkway
Scale: 1/8" = 1'-0"

7S Front Platform Walkway Railing
Scale: 1/8" = 1'-0"

Notes:
 1. All dimensions are in feet and inches.
 2. All dimensions are rounded to the nearest 1/8".
 3. All dimensions are in feet and inches.
 4. All dimensions are rounded to the nearest 1/8".
 5. All dimensions are in feet and inches.
 6. All dimensions are rounded to the nearest 1/8".
 7. All dimensions are in feet and inches.
 8. All dimensions are rounded to the nearest 1/8".
 9. All dimensions are in feet and inches.
 10. All dimensions are rounded to the nearest 1/8".

West Virginia University
SCHOOL OF THE ARTS & DESIGN

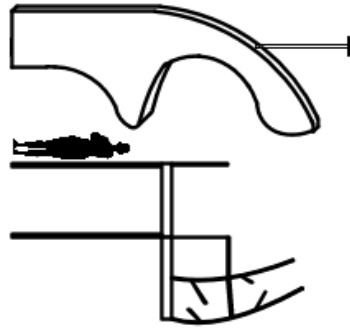
WVU SCHOOL OF THE ARTS & DESIGN PRESENTS:

INSECT PLAY

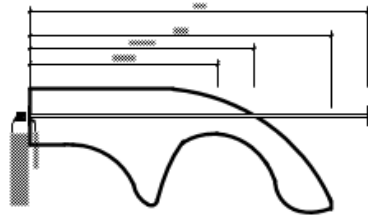
• Platform Walkway •

PROFESSIONAL ENGINEER
 STATE OF WEST VIRGINIA
 LICENSE NO. 12345
 DATE: 12/31/2024

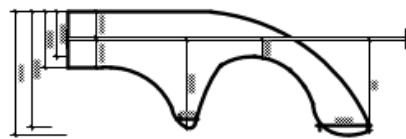
SCALE: 1/8" = 1'-0"



7 US Wall Unit
scale: 1/2" = 1'-0"

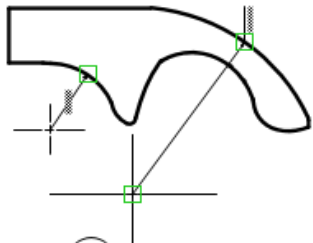


8 US Wall Vertical Measurements
scale: 1/2" = 1'-0"

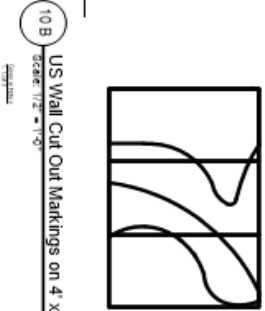


9 US Wall Horizontal Measurements
scale: 1/2" = 1'-0"

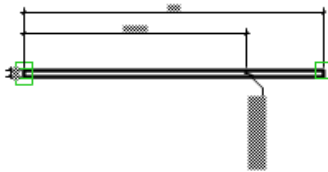
Copyright © 2013 by West Virginia University. All rights reserved. No part of this publication may be reproduced, stored in a retrieval system, or transmitted, in any form or by any means, electronic, mechanical, photocopying, recording, or by any information storage and retrieval system, without the prior written permission of West Virginia University.



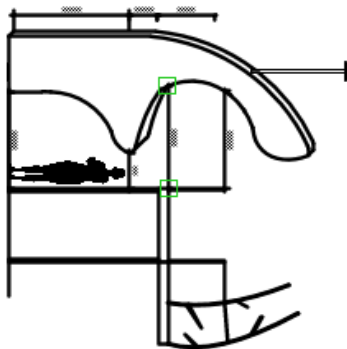
10 A US Wall Radial Dem. & Center Markings
scale: 1/2" = 1'-0"



10 B US Wall Cut Out Markings on 4' x 8' Luan
scale: 1/2" = 1'-0"



11 US Front View
scale: 1/2" = 1'-0"



12 Measurements Between US Wall & Platform
scale: 1/2" = 1'-0"

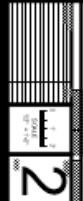
WVU SCHOOL OF THE ATRE & DANCE PRESENTS:

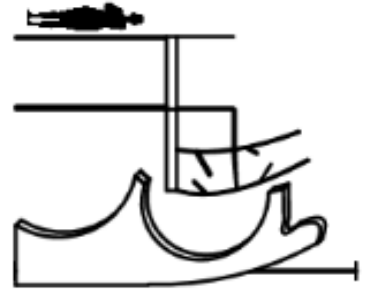
INSECT PLAY

• US Wall Unit •

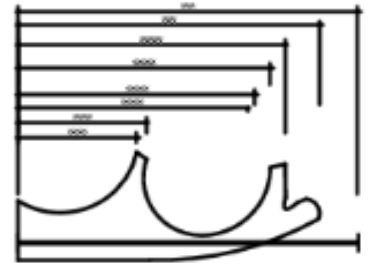


PRODUCTION STAFF:
 PROJECT MANAGER: JESSICA L. HARRIS
 DESIGNER: JESSICA L. HARRIS
 COLLEGE OF CREATIVE ARTS
 WEST VIRGINIA UNIVERSITY





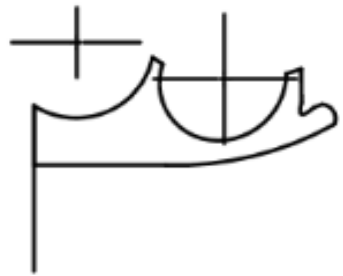
19 SR Wall Unit
SCALE: 1/8" = 1'-0"



20 SR Vertical Measurements
SCALE: 1/8" = 1'-0"



21 SR Horizontal Measurements
SCALE: 1/8" = 1'-0"



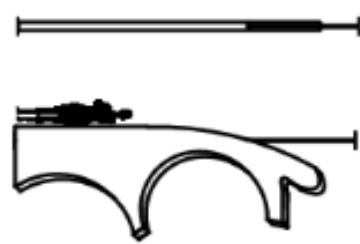
22 SL Center Point
SCALE: 1/8" = 1'-0"



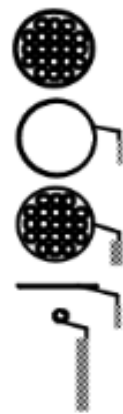
23 A SR Lower Half Cut Marks on 4' x 8' Luan
SCALE: 1/8" = 1'-0"



23 B SR Upper Half Cut Marks on 4' x 8' Luan
SCALE: 1/8" = 1'-0"



24 SR Front View
SCALE: 1/8" = 1'-0"



25 Manhole Cover Top and Side View
SCALE: 1/8" = 1'-0"

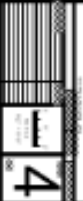
WVU SCHOOL OF THEATRE & DANCE PRESENTS:

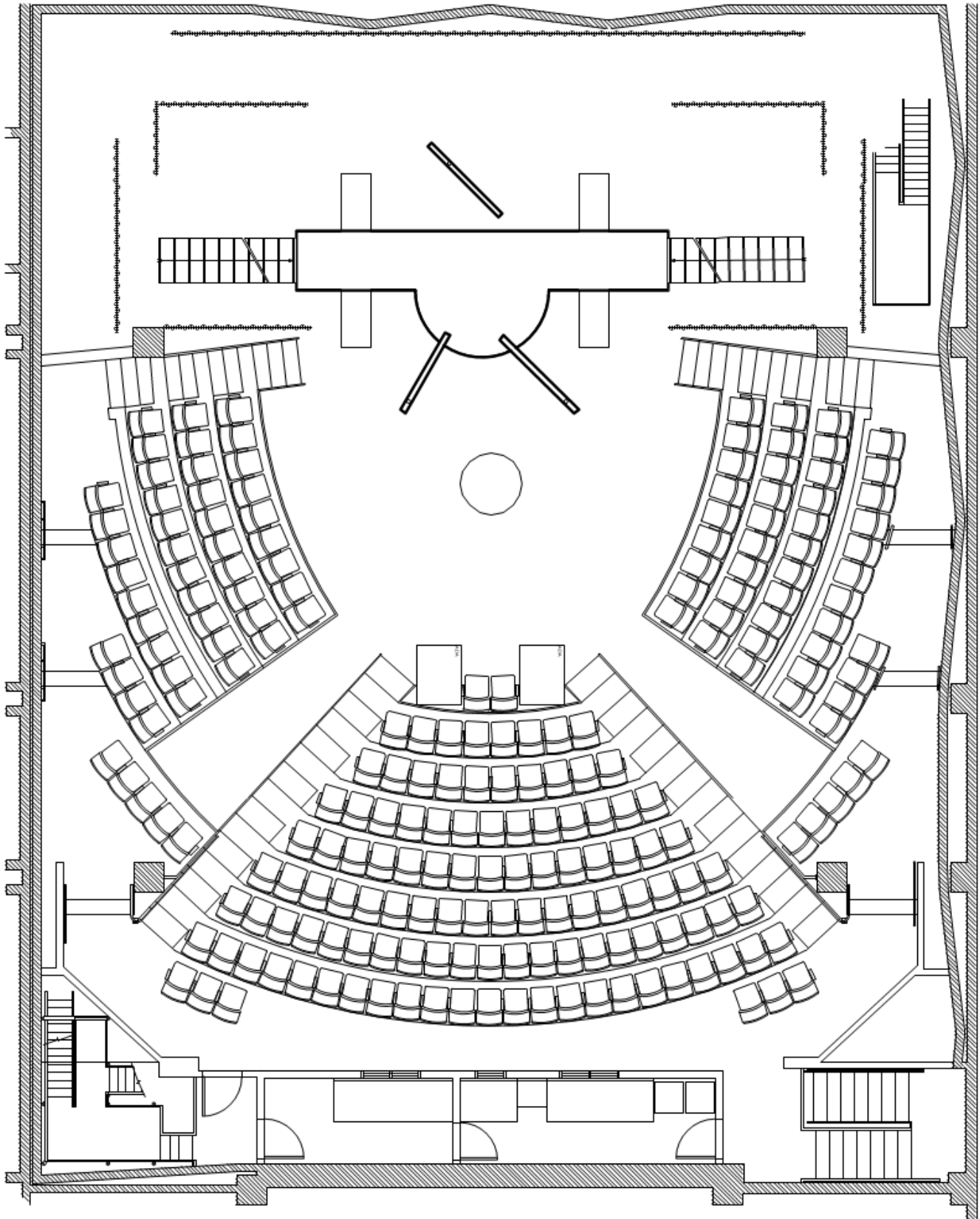
INSECT PLAY

• SR Wall Unit •

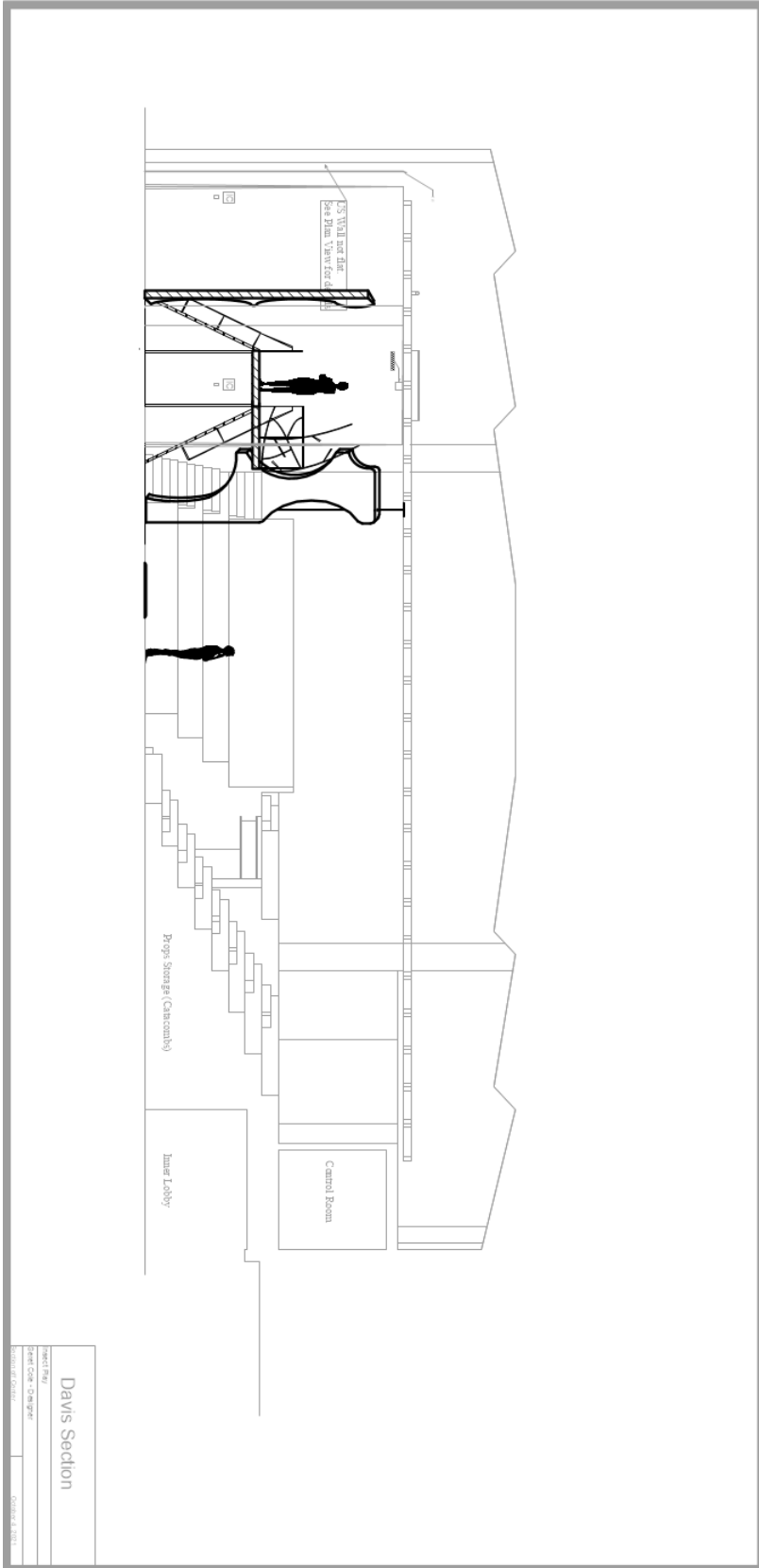


THEATRICAL DESIGNER:
SCOTT W. HARRIS
PRODUCTION DESIGNER:
SCOTT W. HARRIS
SCENE DESIGNER:
SCOTT W. HARRIS
COSTUME DESIGNER:
SCOTT W. HARRIS
HAIR DESIGNER:
SCOTT W. HARRIS
MAKEUP DESIGNER:
SCOTT W. HARRIS
PROPERTY MASTER:
SCOTT W. HARRIS
CATERING:
SCOTT W. HARRIS
CAMPUS POLICE OFFICER:
SCOTT W. HARRIS

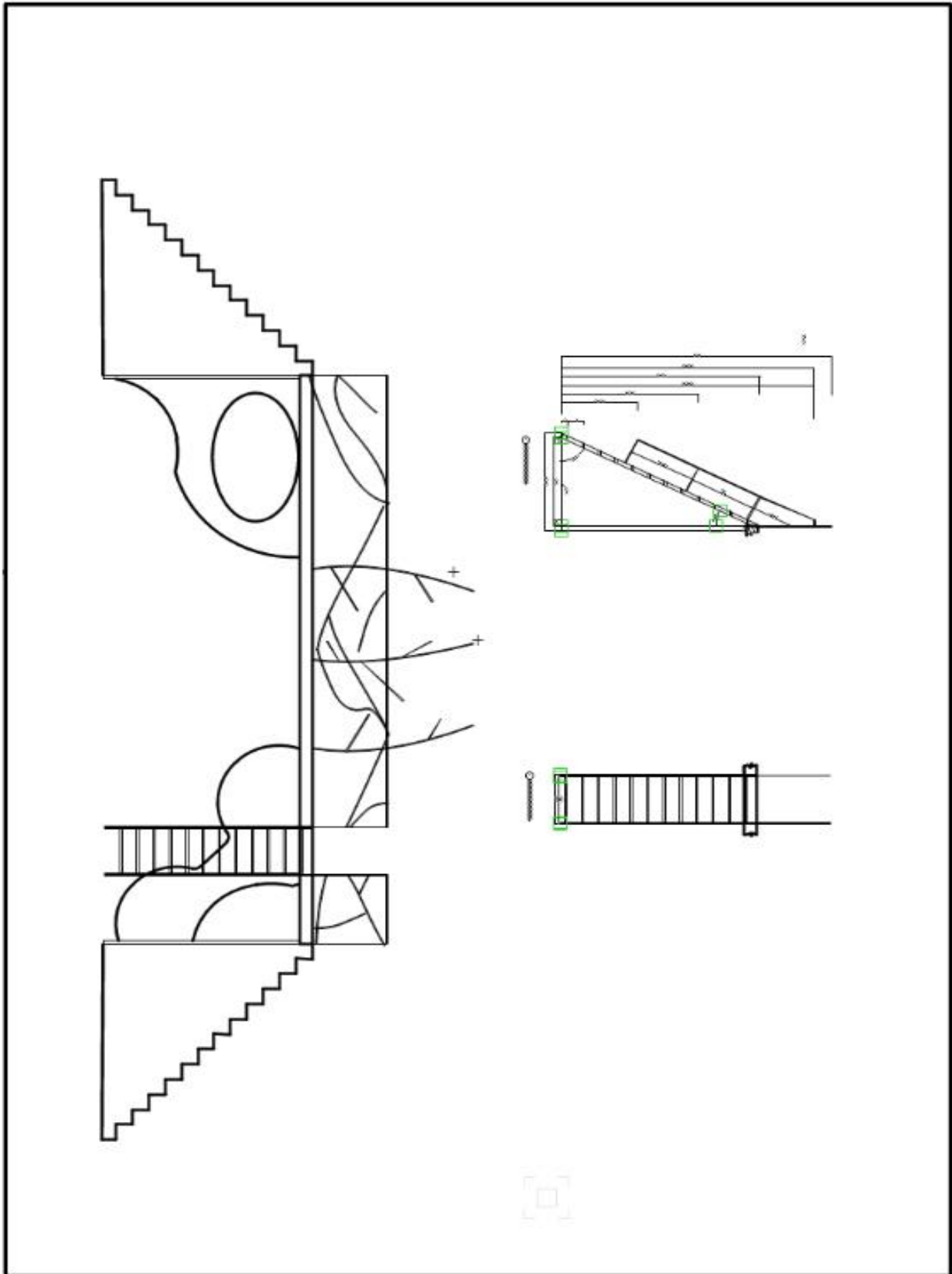




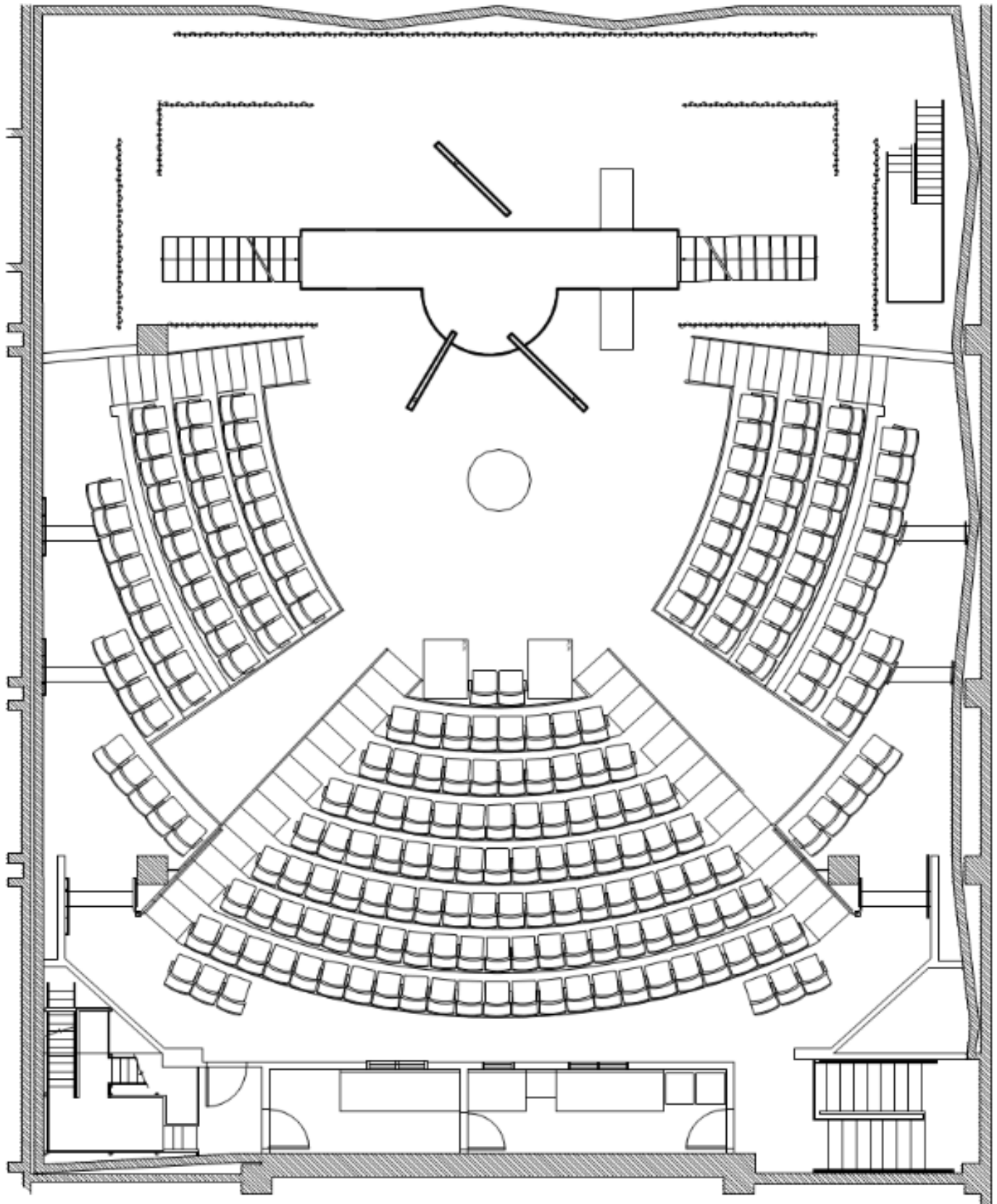
Redesign Ground Plan with 4 Ladders



Redesign Section View with Ladders



Redesign Front Elevation and Ladders



Final Redesign with 2 Ladder Placement

Bibliography

- Burns, Tracy A. "The Artistic Genius of Karel and Josef Čapek." *Prague Guide ~ Prague Tours ~ Private Guided Tours*, 1993, <https://www.private-prague-guide.com/article/karel-capek-josef-capek/#:~:text=He%20was%20exempted%20from%20fighting,until%20his%20death%20in%201938.>
- Čapek, Karel et al. *Four Plays*. Methuen Drama, 1999.
- Harkins, William Edward. Karel Čapek. New York: Columbia University Press, 1962.
- Hurley, Amanda. "The Chrysalis". *Architect*, 2017, https://www.architectmagazine.com/project-gallery/the-chrysalis_o.
- Néret, Gilles, and Catherine Plant. *Dalí*. Taschen, 2015.
- Pilný, O. (2021). The Brothers Čapek at the Gate: *R.U.R.* and *The Insect Play*. In: Pilný, O., van den Beuken, R., Walsh, I.R. (eds) *Cultural Convergence*. Palgrave Macmillan, Cham. https://doi.org/10.1007/978-3-030-57562-5_6
- Price, Jason. *Modern Popular Theatre*. United Kingdom, Bloomsbury Publishing, 2016.
- Stoneman, Anna J. "Socialism With a Human Face: The Leadership and Legacy of the Prague Spring." *The History Teacher*, vol. 49, no. 1, Society for History Education, 2015, pp. 103–25, <http://www.jstor.org/stable/24810503>.
- Wellek, René. "Karel Čapek." *The Slavonic and East European Review*, vol. 15, no. 43, Modern Humanities Research Association, 1936, pp. 191–206, <http://www.jstor.org/stable/4203208>.