

DESIGN DISCOURSE 05

5.1. Design concept

It has already been determined that the area of Salvokop is due for some massive changes. The aim of this project is thus to introduce a regionally significant architectural intervention that serves not only the immediate community of Salvokop but also extends its influence to the greater municipal and provincial populace. In doing so, the development will serve its role as an appropriate catalyst in the inner city and Salvokop community regeneration as planned by the municipal authority.

Performance Art can be divided into three categories: Music, Dance and Drama. Each method of performance has different requirements in the provision of suitable spaces. The building therefore endeavours itself to accommodate the various performance methods completely, in doing so the building may become complete in its appeal to the masses. Diversity of performance and experience is sought, since nothing less should be expected of a community facility in the culturally diverse setting that is South Africa.

Integration of the urban fabric into the layout and public space of the building is key to pronouncing this facility within the context of the Cultural Spine of the Inner City. The flowing relationship between internal and external spaces allows the facility to utilise the surrounding urban context as an extension of its area, blurring the boundary between the site and the Ceremonial Way, and ultimately creating an important relationship between the local community and the Centre for Performing Arts.

Through the process of informed design, it is thus the intention of this chapter to fully substantiate all design decisions taken within a logical and systematic methodology. Thus through preliminary investigations into contextual influences, artistic and architectural responses may be sufficiently executed, ultimately manifesting themselves into a suitable product in the form the proposed architectural intervention for Salvokop.

5.1.1. The Influence of Music and Performance

Music is truly a global language... a language that all understands, appreciates and finds time to expose themselves to whenever the situation allows. Music is therefore a powerful tool for the unification of people, cultures and a tangible method of exploring cultural diversity. Before cultures merged and people were introduced to other people across the continents, music was inevitably grown from within their own communities. As the single truest common feature in cultures around the globe, music has always produced as a form of cultural and emotional expression. The questions are therefore raised: Why is music so personally gratifying and globally important? How does this translate into design decisions?

Firstly, it is a matter of opinion that the significance of a song or performance is not solely based on the content, but on its importance as a tangible measurement of time. Seconds, minutes, hours. What do they really mean? Nothing is the answer. These are an imposed system of incremental and regular ticks and tocks that remain abstract to all who depend on them. And yes we depend on them, very much so. Our system depends on it, but time as we know means nothing. The events that correspond to the serendipitous synchronicity of the system invoke within us meaning and memory. How many of us sit in front of the television and think: "in one minute my favourite television programme is about to start...", we all do is the answer. The minute itself is irrelevant, and once it has passed there will be no record of it ever existing, except as an abstract concept. In fact once that minute is up, our mind is on the next, no memory has been afforded to it. No proof that we were actually present to experience it. No existential satisfaction.

Music is a true measurement of time. It is comprised of a system of beats, a repetitive and predictable rhythm that has a beginning and an end. Not only has time passed during the performance of a song, but memory has been created. Even if a song is new to one's ears, it doesn't take long to tap one's fingers to the beat, to anticipate the crescendo, to learn the words. Past, present and future are merged into a single expanse of "time". Because memory has been created, a real and non-abstract recollection and realisation of time passed is afforded the listener. Self realisation and proof of existence is achieved. Time didn't just pass as if it wasn't there, it moves and pulls and pushes. For those few minutes, the listener has lived, and he/she has the memory of that time to prove it.

Thus, in design terms, music serves as a model inspiration. The internal and external space should speak of a journey for the user, one where time is made tangible and memory is given. The space should be regular and predictable, with crescendos effectively introduced and executed. A comfortable rhythm should be established, with a start and an end. Termination is important, since control is left in the hands of the user, and an end is always comfortably in sight. Spatially speaking, movement and circulation are key. The journey and associated memory through the building are as important as the destination. This is what gives architecture character, not the abundance of facilities but the possibility of experience and self realisation between them.

Figure 5.01

5.2. Baseline Criteria

5.2.1. Users and Participants

The Centre for Performance Arts is intended to cater for three aspects of potential user involvement:

- The public contingent who visits the centre as a paying audience and thus are treated to the performance as intended by its performers and planners.
- The casual public contingent that walks through its doors in hopes of exposure to the worlds of performance that the centre provides the means to explore, both passively and actively.
- The performers and those responsible for the various aspects of a performance. The centre must provide the means for those performers and aspiring performers to hone their skills, to excel in their desired art form and eventually share this gift with the greater community.

The Centre for the Performing Arts will thus seek to serve as a hive of cultural activity with appeal for the public during all hours of the day. By this it is meant that the interests of all cultures in this Country may be represented and have the opportunity to engage with the cultures of others. It is the aim of this project that the building envelope may merge these three degrees of public participation so that each may inform and contribute to the other, providing an enriching experience to all who may enter, beyond the expectations that one usually has upon entering a theatre space or traditional performance venue.

5.2.2. Pedestrian Influence

The Centre for Performing Arts has intended from an early stage to compliment the surrounding physical context to the best degree possible. Since there is no existing context in the form of buildings (yet to come) it is solely on the intended public use of the surrounding context that must inform such issues as the interface between the building and the street, the predominant facades, and issues of scale and orientation. The Ceremonial Way is intended to be the main route for public pedestrian and vehicular movement. This means that it may be expected that the main venues of interest will most likely be negotiated by foot due to close proximities. The intention for a large super-basement of parking for the area that will serve all institutions in Salvokop furthermore substantiates the argument for large pedestrian exposure.

It is important for this pedestrian relationship to the building edge to be exploited to its full potential. The layout of the public parking system on the eastern perimeter of the site effectively pushes a 30m barrier between the building and the main stream of pedestrian movement which is anticipated to occur along the road's edge. (The strip of land lying adjacent to the eastern border of the site is demarcated as public parking area, immediately accessible from the ceremonial way, and forms part of a larger strip intended to serve the freedom park heritage site. Within this generous strip there is space sufficient for approximately 78 car parking spaces.) Thus it is the proposal for the project to bring the main stream of public movement to the threshold of the building, using the public parking as a buffer between public vehicular movement and the pedestrians of the area. This means that

essentially the stream of pedestrians would not need to be broken should parking spaces be sought from the road.

5.2.3. Diversity of Character

In order to promote the building as an innovative and unique element among the performance arts buildings already in existence in the Pretoria area, e.g. the State theatre, the building is in need of a variety of spaces that can accommodate themselves to the extremely diverse nature of the performance arts that this country has to offer, as already addressed this dissertation. It is therefore necessary that this building is representative of the diversity that characterises the city, the region, and even the country. In this way a designer may create an example of architecture which is not solely a "western" intervention, and one that portrays itself according to the already accepted international and European laws of theatre and concert design.

Spaces are intended to reflect the various natures of the performance arts and provide for them optimally. Performance arts are typified in three forms: Dance, Music and Drama. It is therefore imperative that these spaces are catered for, yet not treated in isolation. Spaces within the building should be able to adapt themselves to a variety of performances, within any of these three intended scopes.

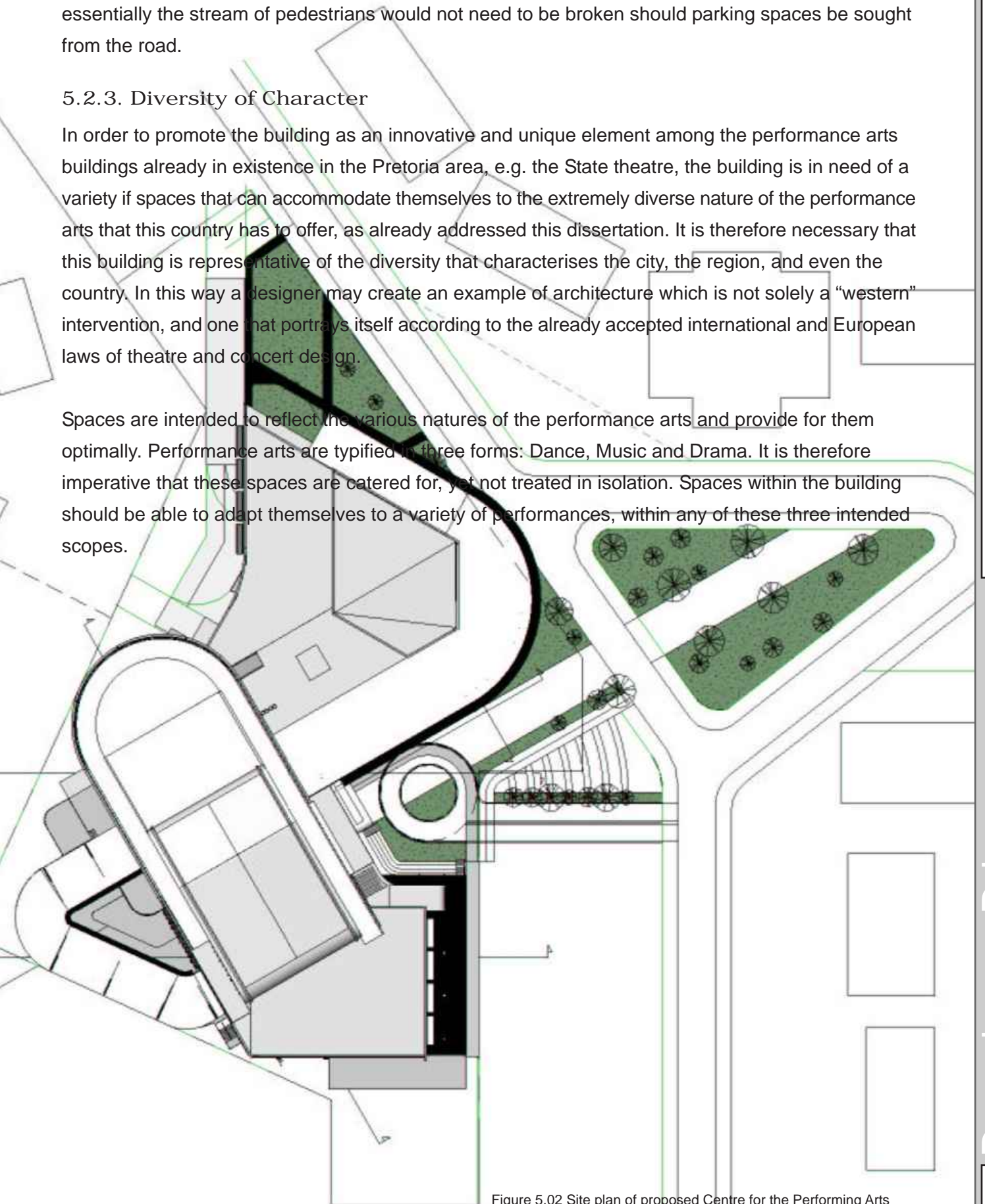


Figure 5.02 Site plan of proposed Centre for the Performing Arts

5.3. Accommodation Schedule

PERFORMANCE SPACES

Room	Facilities	Area	
PRIMARY PERFORMANCE SPACE	Stage Orchestra Pit Raked Seating (traditional layout) Gallery Separate performer access Control Room	0,5m ² / person seated Stage:	335m ² 200m ²
Main performance space. To be used for concert, operatic and dance performances for an audience of 670 people		Total Area:	1024m ²
		Total Volume:	2400m ³

Room	Facilities	Area	
SECONDARY PERFORMANCE SPACE	Stage Open plan Seating Gallery Separate performer access Control Room Exhibition/Scenery Storage	Proscenium Stage Layout: Thrust Stage Layout: Open Stage Layout:	260m ² 260m ² 400m ²
Secondary performance space. To be used for theatre, musicals and dance performances for an audience of 300 to 500 people. Expandable to almost twice its floor area.		Total footprint:	400m ²

Room	Facilities	Area	
EVENTS GALLERY	Raked seating (permanent) Stage (removable) Control Room Separate performer access	0,5m ² per person seated	370m ²
Adaptable gallery space for intimate performances. Continental seating layout. Stage occupies full width of performance space. Capacity of 260 people			

Room	Facilities	Area	
STUDIO THEATRE	Stage platforms Control room Seating storage Separate performer access		215m ²
Flexible space that may be used as rehearsal space for performers or adapted to accommodate an audience for experimental performances.			

Room	Facilities	Area	
OUTDOOR PERFORMANCE SPACE	Stage Seating Performer access Dressing rooms		450m ²
Outdoor stage area surrounded by fixed sloped seating. May be used in entirety or to smaller groups occupying a portion of the seating area.			

ANCILLARY SPACES

Room	Facilities	Area	
CONTROL ROOM	Projection equipment Control panel Storage		20 - 25m ²
Point of control for performance related lighting and sound effects. Requires overlook of performance area without interference to audience.			

Room	Facilities	Area	
DRESSING ROOM – PRINCIPAL ARTISTS	Cupboard space Make-up and grooming desk with mirror Full length mirror Bed Shower and WC Visitor area Rehearsal space with piano		13,6m ²
7 ROOMS Single room. Should be at stage level. At least one room per sex should have a piano or a performance practice room. Rooms should be planned to allow for visitors and dressers.			

Room	Facilities	Area	
DRESSING ROOM – MINOR PRINCIPALS / SOLOISTS	Personal hanging cupboard space Closet and drawer for personal possessions Seating		17m ²
MALE AND FEMALE 8 ROOMS OF 4 PEOPLE Rooms at stage level. Allocated according to the size of cast. Four cast members accommodated			

Room	Facilities	Area	
DRESSING ROOM – CHORUS / BODY OF PERFORMANCE	Personal hanging cupboard space Closet and drawer for personal possessions Seating		42m ²
MALE AND FEMALE TWO ROOMS OF 16 PEOPLE Two large rooms per gender, each sub-divisible to create more intimate and secure dressing rooms for up to four people. Depends on size of performance.			

Room	Facilities	Area	
DRESSING ROOM – CHILDREN	Personal hanging cupboard space Closet and drawer for personal possessions Seating Showers and WC		42m ²
MALE AND FEMALE 2 ROOMS OF 10 CHILDREN Must be separated from other performers with allowances for accompanying adults. A separate WC must be set aside for their exclusive use.			

Room	Facilities	Area	
LOBBY	Sound proofing Dual threshold (two sets of acoustically insulative doors) Security checkpoint		Each Lobby: 15m ²
Eliminates infiltration to and from stage from dressing room areas. Acts as Sound lock.			

Room	Facilities	Area	
MAKE UP	Four swivel chairs – barber style Basins Multiple electrical outlets.		12m ²
Room for four performers at a time, with space for circulation around each during preparation.			

Room	Facilities	Area	
GREEN ROOM	Couches and lounge area Coffee dispenser Basin Kitchenette Television		15m ²
Common room, restroom and canteen for performers prior to performance. Situated near to dressing rooms.			

Room	Facilities	Area	
INSTRUMENT STORE	Broad shelves Secure lockers Freight lift		100m ²
Space for larger instruments and scenery that can not be carried by performers to be stored near to orchestra pit or stage platform			

Room	Facilities	Area	
ORCHESTRA ASSEMBLY AREA WITH LOBBY	Broad shelves Benches		208m ²
Space for additional storage of instruments, final point of orchestra assembly and preparation before entering the stage area. Requires benches and broad shelves for large musical instruments.			

Room	Facilities	Area	
OFFICE OF STAGE-DOOR KEEPER	Desk Computer Registration counter		15m ²
Point of access control as first point of contact to ancillary space core from outside. Registration desk and associated office.			

REHEARSAL SPACES

Room	Facilities	Area	
REHEARSAL SPACE – PRIMARY PERFORMANCE SPACE	Chair storage Prop storage Performance platform Mirror wall Sound system		146m ²
Proportioned to the same dimensions as the concert hall stage, positioned next to dressing rooms. May be used as additional dressing room space.			

Table 5.1 Accommodation Schedule

Room	Facilities	Area
REHEARSAL SPACE – SECONDARY PERFORMANCE SPACE Adjacent to studio theatre, within easy access. Proportioned to cater to needs of up to 15 performers.	Chair storage Prop storage Performance platform Mirror wall Sound system	60m ²

Room	Facilities	Area
REHEARSAL SPACE – SOLOIST AND GROUP PERFORMERS Space for a large piano and additional performance members.	Chair storage Prop storage Performance platform Mirror wall Sound system	25 - 81m ²

Room	Facilities	Area
DANCE REHEARSAL AND STUDIOS Height of 4,5m. sprung floor and mirrors of 2,4m in height with practice barre. Open to natural lighting with option of light proof blinds.	Chair storage Prop storage Mirror wall and practice barre Sound system Locker room WC's and showers	Dance Studio 01: 125m ² Dance Studio 02:: 157m ²

OFFICES

Room	Facilities	Area
BOARD ROOM Meeting room with appropriate sound insulation to accommodate important meetings of the steering committee as well as administrative meetings of a large number of people.	Central table, large Seating up to 10 people Audio visual equipment storage Deployable screen Shelving	52m ²

Room	Facilities	Area
ADMINISTRATIVE DIRECTOR Standard office of generous proportions used for administrative work and for accommodating meetings with two to three people	Working desk Computer Seating for four Cabinet space	22m ²

Room	Facilities	Area
ADMISTRATORS Standard office of generous proportions used for administrative work and for accommodating meetings with two to three people	Working desk Computer Seating for one Cabinet space	15 (single) to 25m ² (shared)

PUBLIC SPACES

Room	Facilities	Area
FOYER SPACES Concert Hall – upper level Concert Hall – mezzanine Concert Hall – lower level Drama Theatre – upper level Drama Theatre – lower level Studio Theatre Events Gallery	Seating area Exhibition space Variable lighting Access control	2m ² per person occupying 600 to 1200m ²

Room	Facilities	Area
MULTIMEDIA ARCHIVE Chronological display of musical instruments. Information nodes and terminals for passive learning. Electronic database resource for active data retrieval. Space for sharing and exploration of culture and ideas.	Musical instrument display Information terminals Televisions Projection screens Discussion space Seating	500m ²

Room	Facilities	Area
PROJECTION SPACE Space for learning and exposure to culture through means of video, video conferencing and images. Space may be furthermore linked to outdoor public performance space to facilitate real-time performance collaborations through video link to various parts of the world.	Large display (front projection) Seating Blinds (exclusion of natural light) Access control Sound system Control room	Seating: 40m ² Performance/Presentation: 200m ² Total: 240m ²

Room	Facilities	Area
COFFEE BAR Comfortable seating and refreshments to provide a rest area for public to utilise when partaking in the facilities of the building.	Kitchenette Goods storage Bar Tables and chairs Balcony	Kitchenette: 25m ² General Seating: 580m ² Total: 605m ²

5.4. Spatial Framework and Functional Relationships

Since the heart of the development is to provide the means for performers and audiences to interact and share spaces without inhibition and difficulty, the design of these spaces has been detailed before the building can take shape in total. In essence this is the nature of the progression of this design.

The main performing spaces are considered before all else in order to ensure that once finalised, the building succeeds on its most basic level, to provide a good show for audiences and optimum facilities for performers. The five main performing spaces that will be contained within the building may be described as: Principal Performance Space (concerts, orchestra, dance), Secondary performance space (drama, dance, cabaret), Events Gallery, Studio Theatre, Projection Room (Media Room), and Outdoor Performance Space. These spaces shall now be discussed.

5.4.1 The Principal Performance Space

Intentions: To be the main focus of the building for paying audiences of approximately 500 to 700 people. Thus this multi-purpose space will contain the greatest capacity for audiences, but should also be flexible to cater for performances that do not require extensive seating capacities. Due to significant differences in acoustical and visual requirements the forms of performance that will be accommodated within this space will be typically:

- Concert and other musical performances by bands, choirs and orchestras;
- Dance performances in the form of cultural performances, ballet and modern dance. These dances shall be in the position to receive musical accompaniment in the form of bands and orchestras.
- Opera

Requirements:

- Centrally positioned stage with sufficient floor area for up to 40 members of an orchestra of musical band (1,1m² per person minimum)
- Orchestral pit integrated into stage design, potential access to sub-stage storage
- Multiple level accesses for public from centralised foyer areas
- Separate access and exit for performers from dressing and rehearsal rooms
- Dedicated scenery storage with easy access
- Chair storage for loosely packed chair arrangement for certain performances.
- Interior volume of approximately 4m³ per person as specified for optimal acoustical performance.
- Maximum distance to furthest seat: 30m, in order to retain visual relationship to stage and reduce sound attenuation over distance.

Design Decisions: Already stated was the intention to include a flexible seating layout to compensate for varying capacity requirements. Previous concert hall and theatre designs have exploited the idea of a movable ceiling that is capable of dropping down over the upper gallery seating thus improving the psychological effect for performers on stage by not confronting them with a half empty auditorium,

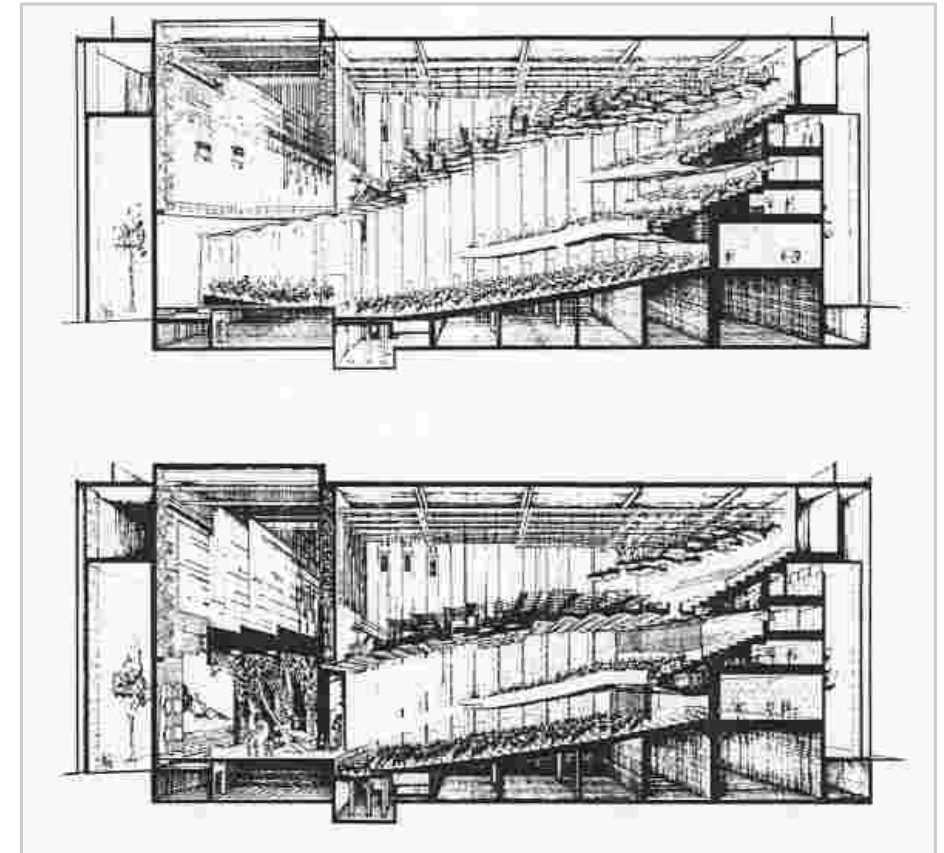


Figure 5.03 Section through auditorium of the Jesse H. James Hall in Texas. Inspiration drawn from descending ceiling for internal subdivision of space

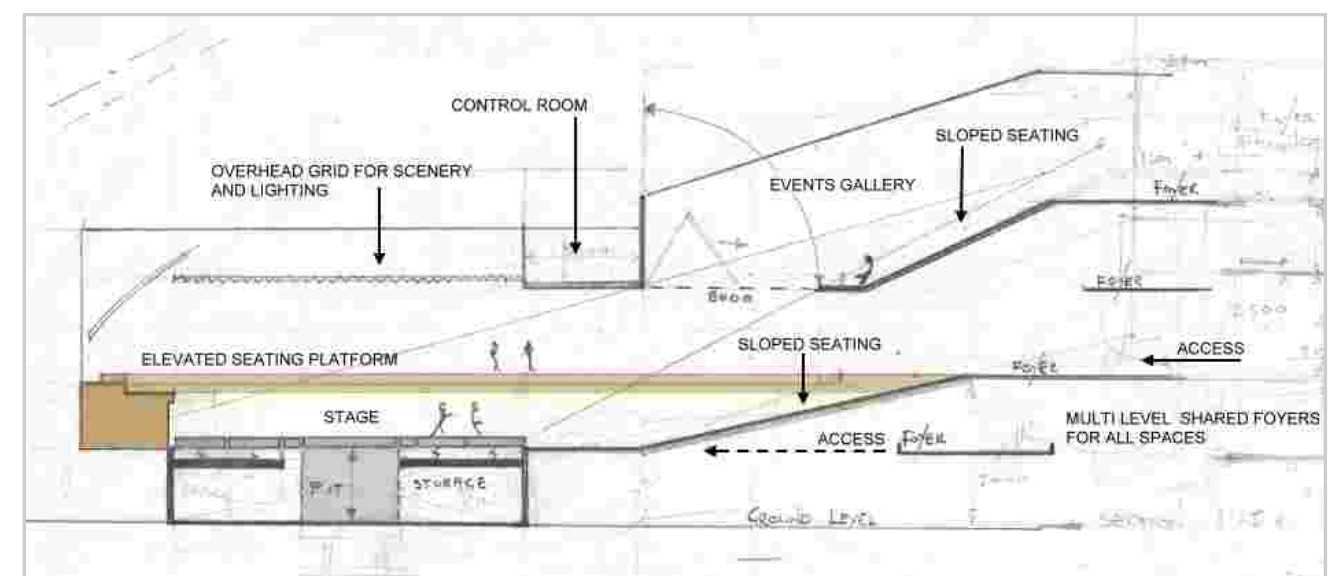


Figure 5.04 Concept sketch of intended layout for Principal Performance Space, illustration of central nature of stage and encirclement by various levels of audience seating

as well as altering the acoustical performance of the space. It is this design innovation that inspires a design which may be able to separate an elevated seating area from a main performing space. It stands to reason that it is unfortunate that the seating of the gallery be lost to public use through repositioning of the ceiling, thus it is the aim of this design to retain this space as a separate performing space when not in use by the concert hall as an extension of seating capacity (Events Gallery).

Most performing spaces in use around the world can be described as having a confrontational layout, i.e. a stage opposing an audience. This creates a definitive division and intangible barrier between audience and performers. Many designers have sought to blur this division by pushing the stage into the audience and by surrounding it on all/some sides with seating. The layout of the concert hall will reflect this principle by surrounding the stage with seating so that the audience may be engaged at all extents of the interior. What this achieves is a performance that may be experienced differently by each member of the audience depending on their seating position within the concert hall. Fixed seating behind negates the potential for a backdrop which requires a fixed point of perspective on the part of the audience. The stage itself is required to contain some form of flexible arrangement to accommodate the various forms of performers that could occur. Thus it is the concept of this design to construct the stage of vertically displaceable platforms that may be fixed at three preset heights: Floor level, Stage level, and Twice stage height. What this means is that the stage itself can be positioned to increase floor area by setting at floor level and thus accommodate for loosely packed chairs in place of the forestage, or elevate itself in certain areas to give prominent position to certain performers, e.g. the choir. A circular stage (of collective platforms) takes its origins from the African traditional layout of performance and dance spaces as a central feature with participants and observers situated around on all sides. The circular layout also does not give any particular importance to any direction of view, but instead engages each equally.

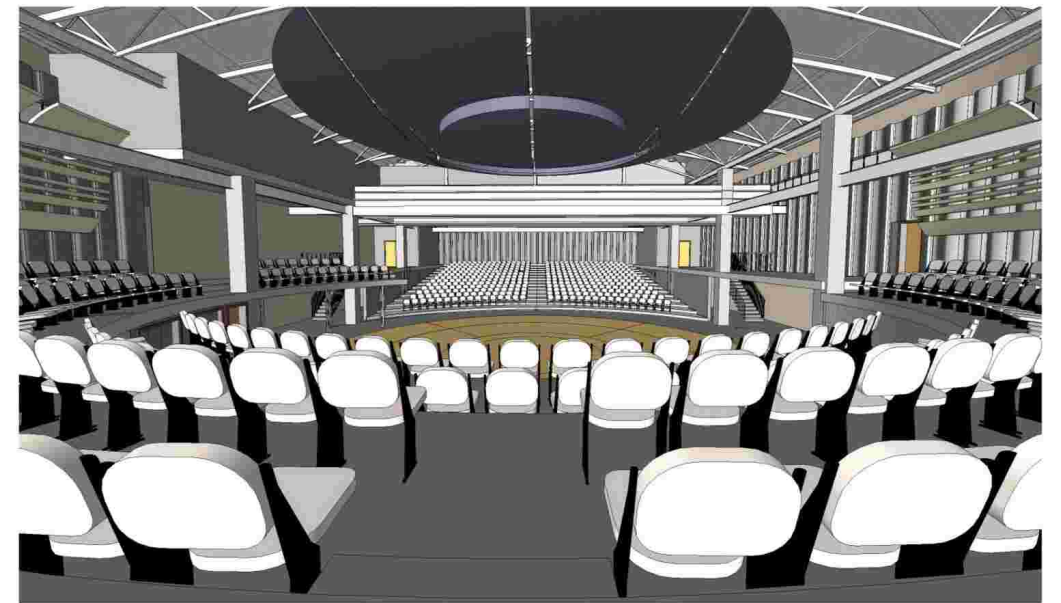


Figure 5.05 Internal layout of Principal Performance Space

Multiform Stage

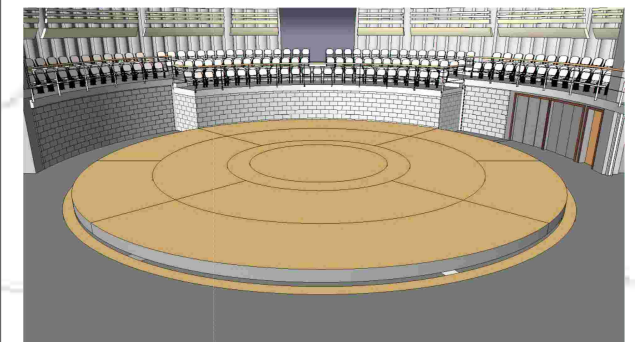


Figure 5.06 Stage components positioned in uniform level

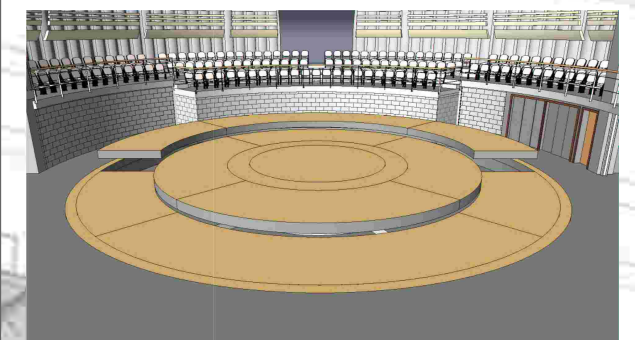


Figure 5.07 Forestage sunken to expand area for seating. Elevated at rear to accommodate performers, eg. choir

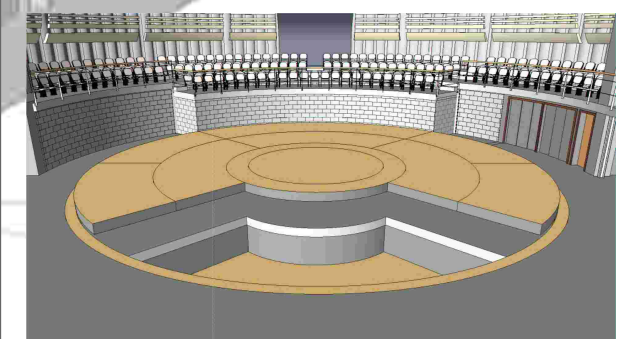


Figure 5.08 Orchestra pit sunken, stage arranged to engage audience

Figure 5.9

5.4.2. The Secondary Performance Space

Intentions: The direction of approach if this more intimate space is intended to host such performances that include drama and other speech related performances. While music and dance are to be accommodated for, orchestral influence will be limited and reserved for the Principal Performance Space. The Secondary Performance Space will be designed as a multi-form space that accommodates for a variety of theatre performances, according to the needs of the performers. The space will be designed to incorporate a false proscenium for performances requiring fixed scenery and backdrops, an adjustable forestage to create a thrust stage layout where importance of backdrops and scenery is reduced, and a central stage layout that may be surrounded on all sides by audience seating. The interior areas shall be sub divisible in order to create a variety of functions that can occur simultaneously.

Requirements:

- Modifiable stage with sufficient floor area for up to 20 members of a drama cast or ensemble
- Multiple level accesses for public from centralised foyer areas – base level and gallery
- Separate access and exit for performers from dressing and rehearsal rooms
- Dedicated scenery storage with easy access
- ‘Stage House’ structure/grid above stage in order to drop and raise scenery from stage during performances
- Seating capacity for 300 to 500 people
- Chair storage for loosely packed chair arrangement for certain performances
- Maximum distance to furthest seat: 20m, in order to ensure that audiences can observe facial expressions of actors, as well as prevent sound attenuation over distance

Design Decisions: a hexagonal form was chosen in order to exploit the convergent nature of perimeter based seating, all focussed towards the centre of its geometry. By placing a stage of variable dimensions in the centre, the hexagonal geometry may be partitioned at its centre line, providing adequate backdrop and stage area for proscenium and thrust stage performances. The space created to the rear may thus be retained as a makeshift storage area to supplement performances, or an exhibition space for local artisans. Seating in this area shall be of ‘bleacher’ construction so that it extends out of the wall when in use for performances, or folds up to become part of it when floor area is needed. Performer access to the stage must be unobstructed at all times and shall be obtained directly from dressing rooms, removed from public circulation. Scenery storage will be provided directly adjacent to the performance space with option to store and utilise scenery and props during performance via a suspended space frame grid above the stage area.

Proscenium Layout - Space divided into two usable public areas. Confrontational layout between performer and audience. This stage configuration gives preference to calculated audience views and interactions of performers and backdrop

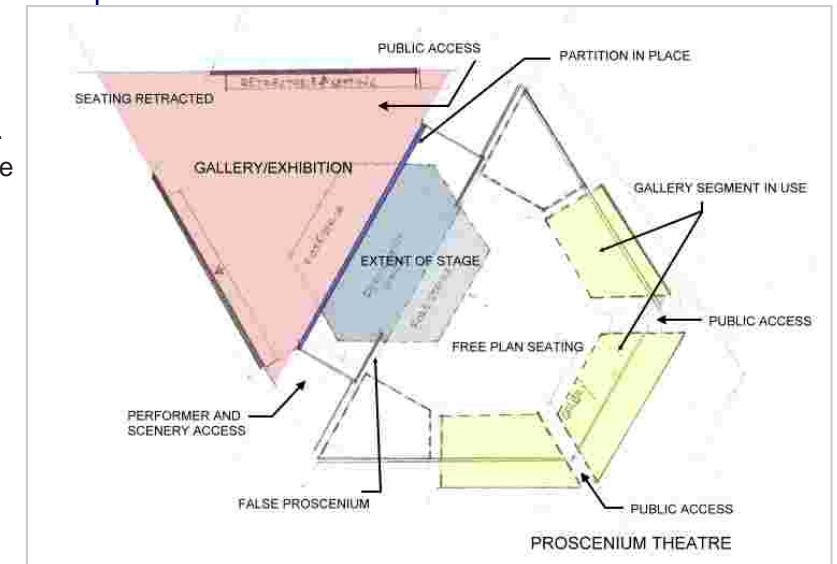


Figure 5.10

Thrust Stage Layout - Space divided into two usable public areas. 180 degree encirclement by audience. Backdrop not integrally important to performance

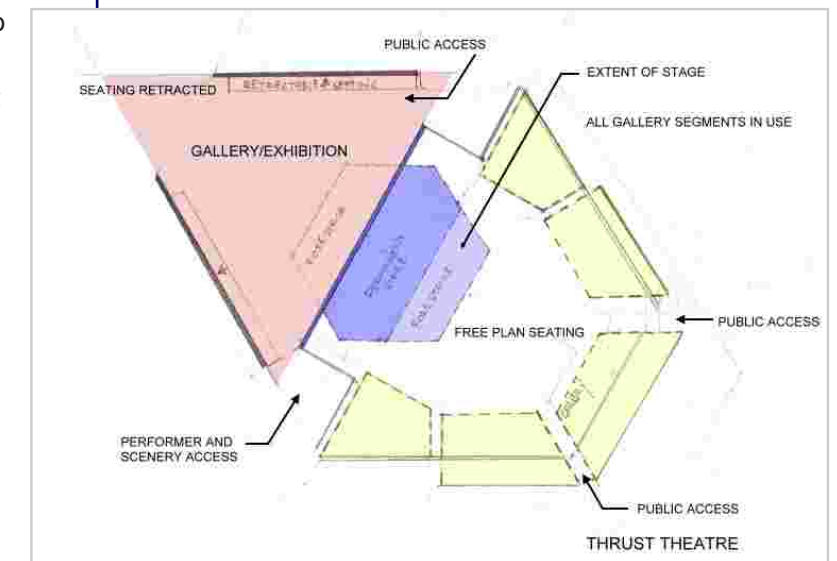


Figure 5.11

Open / Arena Stage Layout - 360 degree encirclement of stage results in a dynamic performance where preference is not given to any point of view

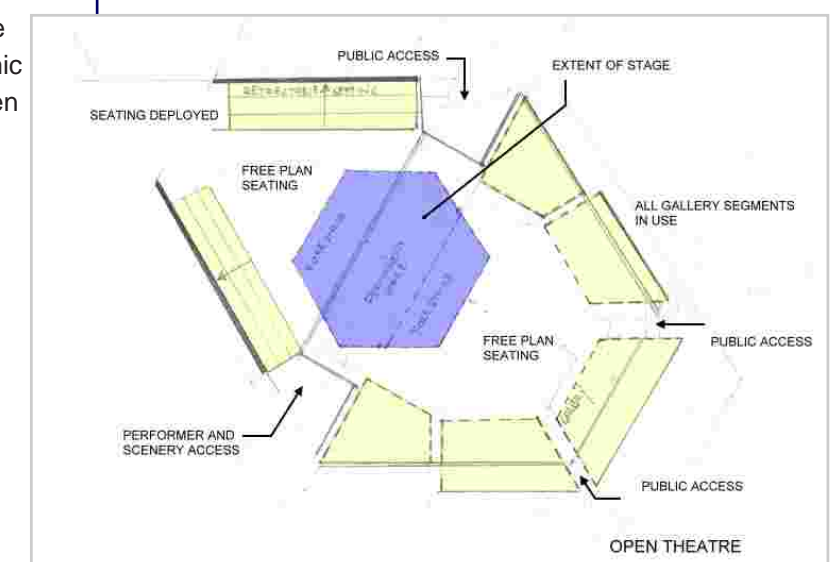


Figure 5.12

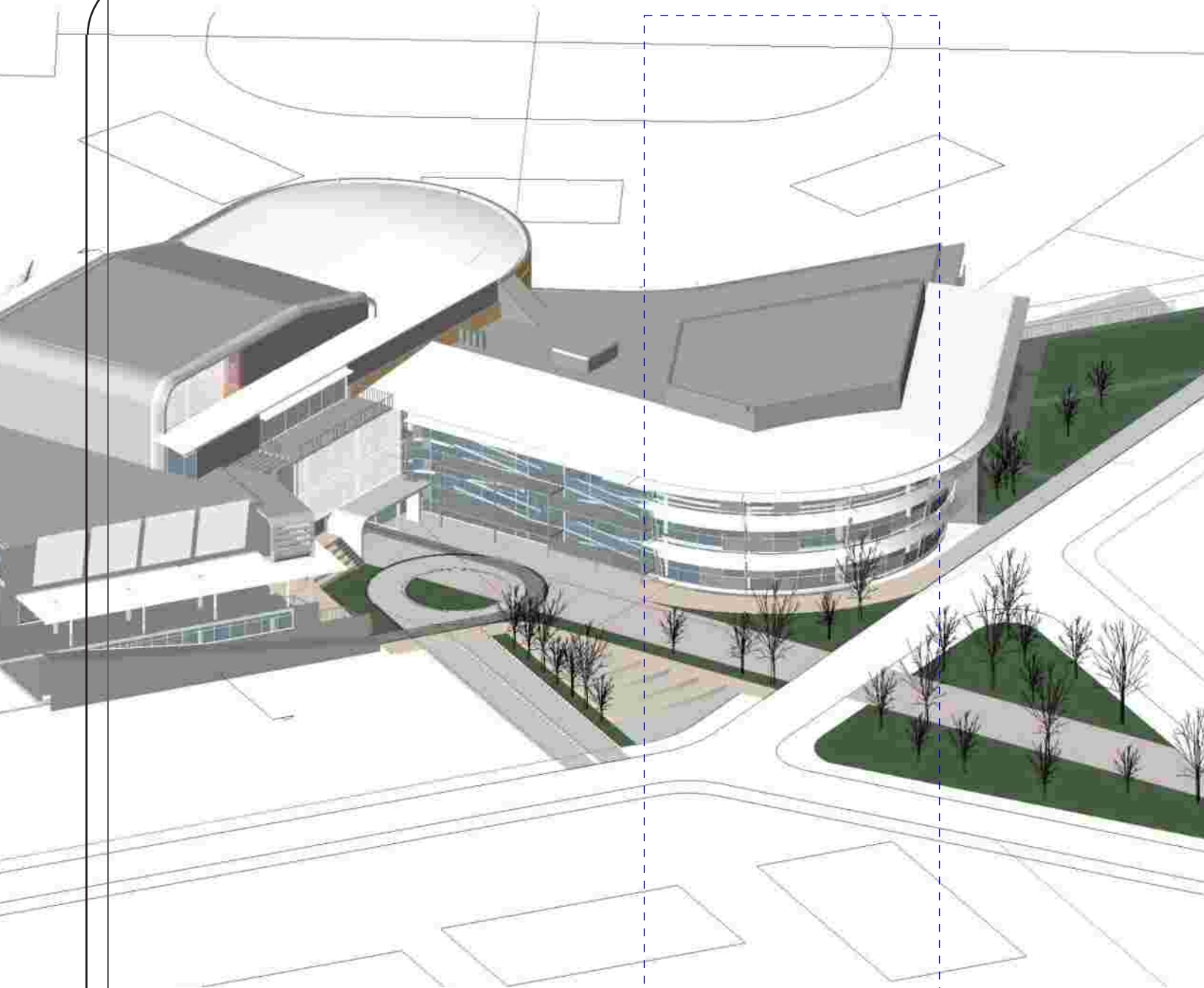


Figure 5.13

Seating on the base level for audiences will be defined by configurations of loosely packed chairs in order to exploit fully the variety of vantage points that the stage has to offer for audiences. Chairs shall be comfortable and interlocking, and may be positioned directly in front of the stage or surrounding it on all sides. Fixed seating will be positioned in the gallery level which will overlook the stage from an elevated position. The gallery shall be broken into segments, and of various heights above stage level. The gallery will provide 180 degree encirclement around the stage, occupation of each 'segment' will depend on the nature of the performance and appropriate sightlines.

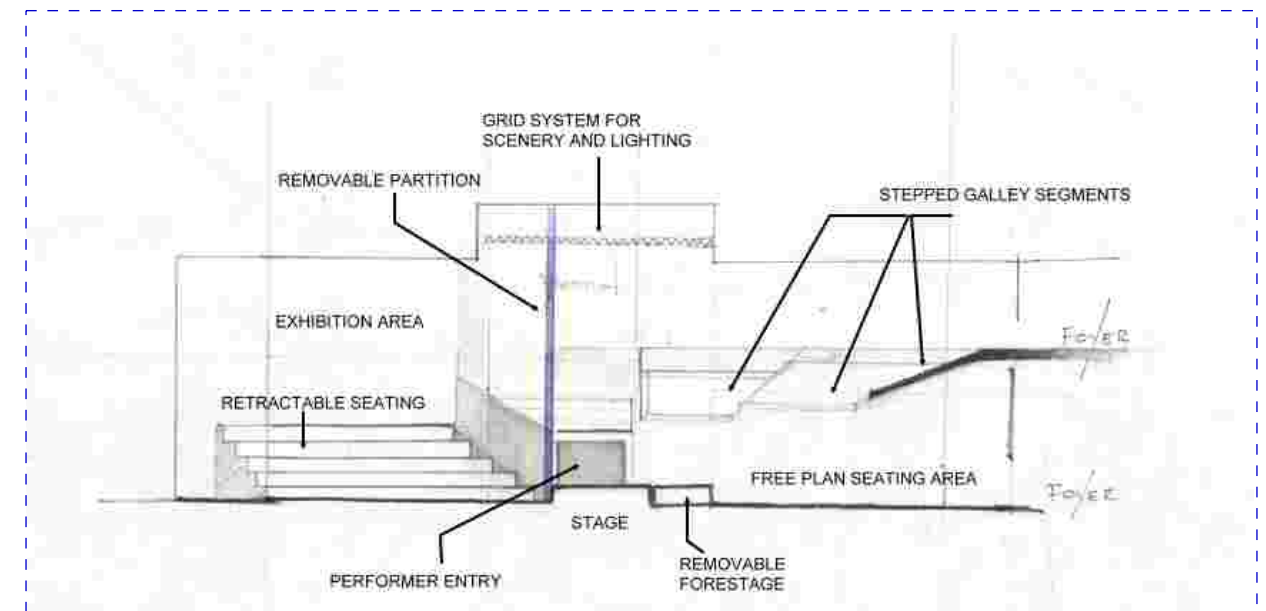


Figure 5.14 Sketch section of Secondary Performance Space

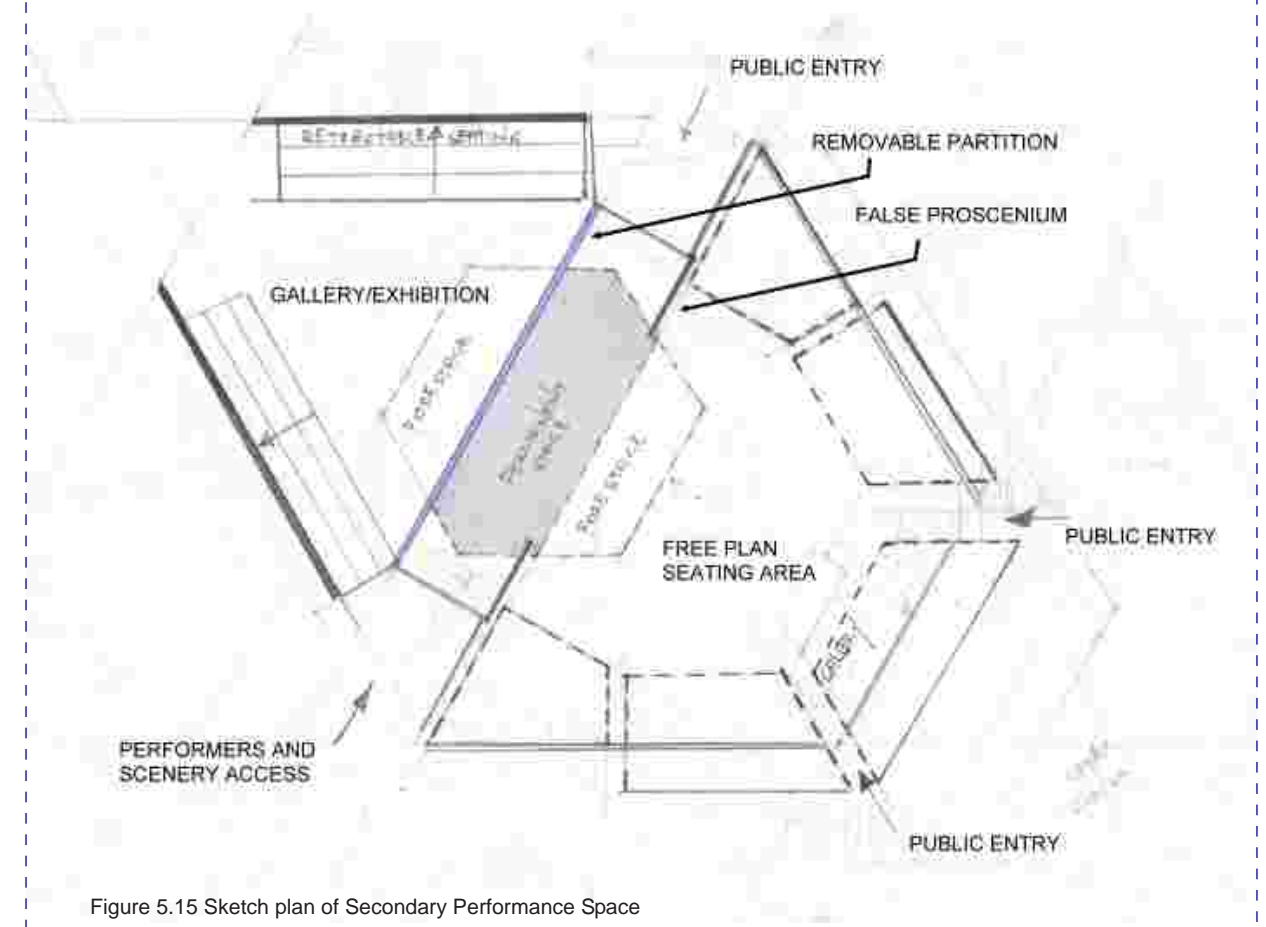


Figure 5.15 Sketch plan of Secondary Performance Space

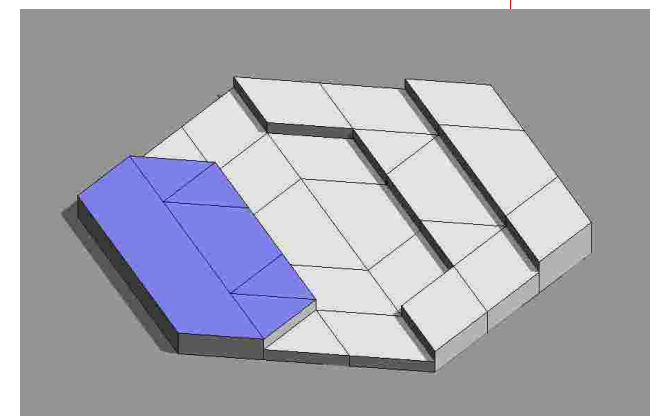
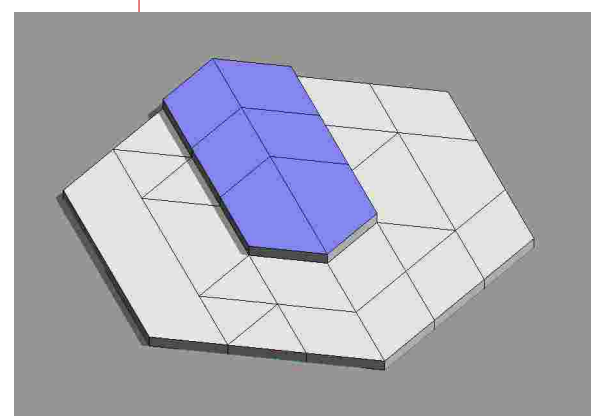
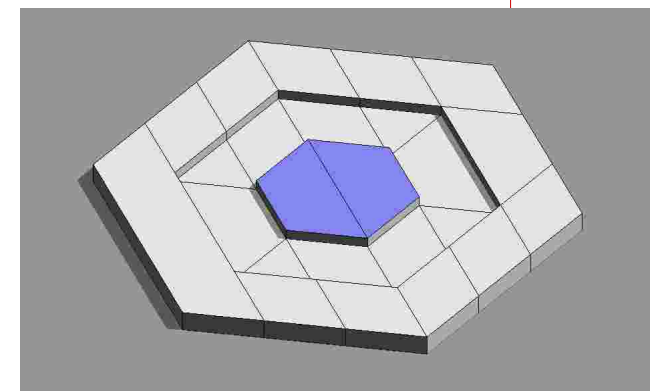
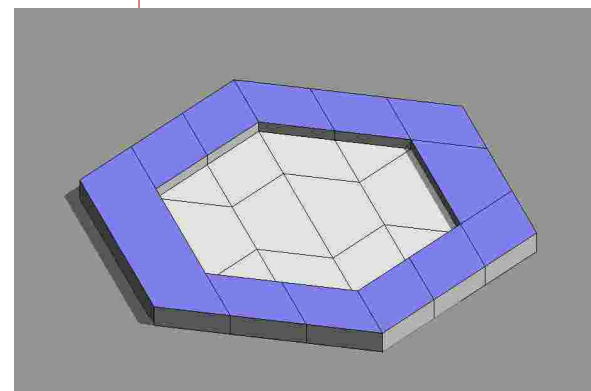
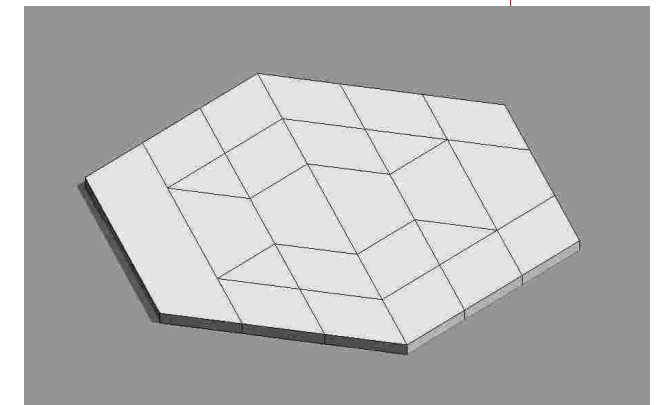
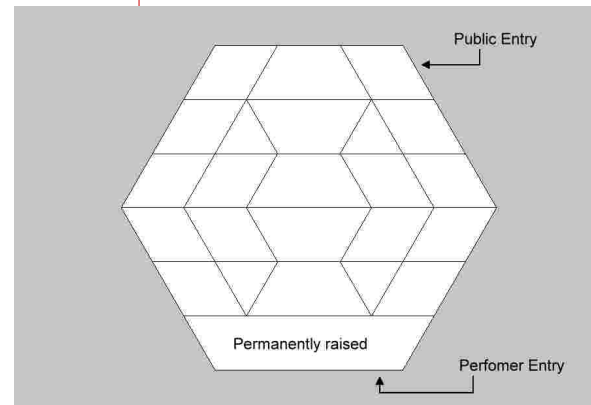
5.4.3. The Studio Theatre

Intentions: The studio theatre performance space is intended to have a dual role. The space will serve performers as well as artists under instruction as a rehearsal and learning space. Secondly it will be a space that can be converted to accommodate a small audience for intimate and experimental performances. The space will serve performers of music, dance and theatre. In order to cater for a variety of performances, the internal space must be completely flexible and allow for a variety of stage configurations.

Requirements:

- Flexible floor area, movable stage
- Single level access for public from centralised foyer area Separate access and exit for performers from dressing and rehearsal rooms
- Relationship to alternate rehearsal spaces
- Separate entry for audience and performers.
- Seating capacity for approximately 100 people
- Chair storage for loosely packed chair arrangement for certain performances
- Movable or modifiable stage
- Maximum distance to furthest seat: 20m, in order to ensure that audiences can observe facial expressions of actors, as well as prevent sound attenuation over distance

Design Decisions: inspired by design decisions taken in the Secondary Performance Space, a hexagonal form is again considered due to its symmetrical and easily divisible internal layout. By subdividing the internal floor area into regular and repetitive rhomboid and triangle geometries, the entire floor area therefore effectively becomes a potential stage. These divided geometries are then given the property of vertical displacement as in the case of the concert hall stage. Thus by raising certain platforms and lowering others a variety of configurations can be achieved. For example, a central hexagon may be raised as a stage to be surrounded by loosely packed seating, or the stage may be left to one of the sides while the seating is positioned opposite, all in equal orientation to the other. Scenery and props will be afforded access to create potential for exciting performances within. Lighting shall be distributed into groups of fixtures suspended above the entire floor area which may then be activated according to the appropriate stage configuration so as to cause no discomfort to the audience.



Figures 5.16 to 5.21. Isometric models of SStudio Theatre stage layout possibilities. Blue Areas indicate spaces for performers (stage). Grey areas are retained for use by audience

5.4.4. The Events Gallery

Intentions: This space will have two functions: to provide gallery seating to paying audiences for performances within the main concert hall when a large audience capacity is required, and to act as a separate performing space by closing itself off from the main concert hall.

Requirements

- A recessed stage that separates the gallery space from the concert hall
- All sightlines from gallery area to concert hall stage below must be retained without obstruction
- Single-level access for public from centralised foyer areas
- Separate access and exit for performers from dressing and rehearsal rooms
- Interior volume of approximately 3m² per person as specified for optimal acoustical performance.
- Maximum distance to furthest seat: 20m (from recessed stage), in order to ensure that audiences can observe facial expressions of actors, as well as prevent sound attenuation over distance
- When in use separately, noise from conjoined spaces must not interfere with the other during performances

Design Decisions: due to the elevated nature of this performance space – effectively above the Principal Performance Space – the main foyer space will be placed in conjunction with a centralised vertical circulation system consisting of lifts, escalators and stairs. Seating will be fixed and positioned according to a regular slope, ensuring that sightlines are optimum for which ever purpose the space is deemed to be used for. Space behind the stage/void area must be allocated for performers' access at stage level.

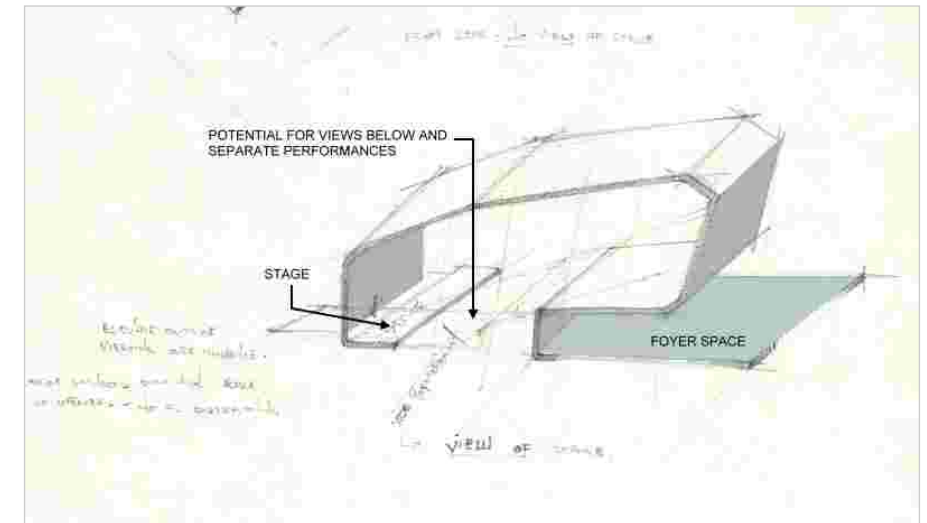


Figure 5.22 Oblique sketch of form for Events Gallery

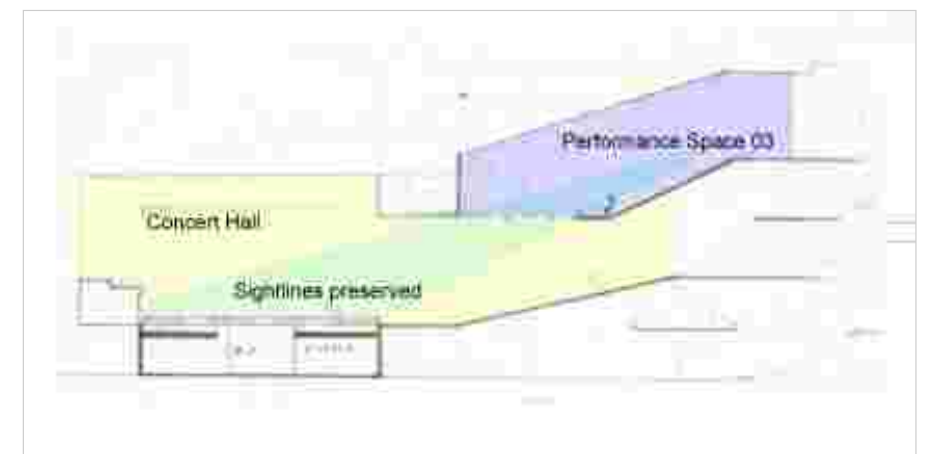


Figure 5.23 Section through Primary Performance Space. Illustrates sightlines and spatial division of spaces. Means for separating spaces is intended to occur through a removable stage that rises to form ceiling reflector.

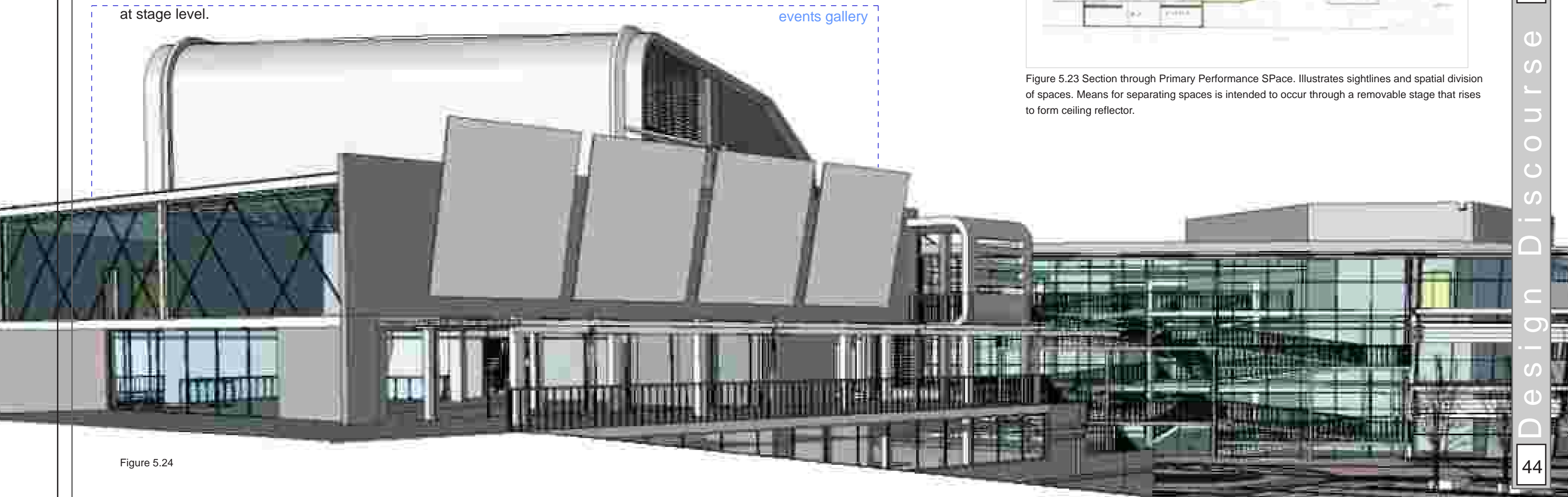


Figure 5.24

5.4.4. Dressing Rooms and Rehearsal Spaces:

Intentions: Performers should be afforded the utmost convenience in order to rehearse and prepare for performances. Therefore a direct relationship between these mentioned spaces and the stage is needed. Since the main spaces of the Concert hall, drama theatre and studio theatre all require the same level of facilities, it stands to reason that a ancillary spaces core be established that serve these areas effectively. The advantage of this shared core is that it may thus be designed to be separate from the routes of main public circulation, have a direct relationship to storage and the service deliveries for performances, and ultimately minimise the footprint of the ancillary spaces to leave more area for public utilisation. Thus all spaces may be served with minimal disruption caused by negation of extensive distances.

Requirements:

- Separate performer access and circulation independent of public circulation areas.
- Dressing rooms need to accommodate all performers in cases of simultaneous performances by various spaces
- Rehearsal spaces need to acoustically isolated from the main performance spaces but within proximity
- Rehearsal spaces must be able to be used as studio space for artists in everyday occasion.
- Dressing rooms need to accommodate space for group changing with locker space (8 rooms for 10 people each), as well as personalised dressing rooms for soloists and celebrity performers (6 in total) – see accommodation schedule for respective floor areas.
- Generous wardrobe space and tailor space as first point of contact for performers.
- Make up and green room as threshold for each main performance space
- Freight lift of generous proportions to transport scenery and materials from assemblage and storage on basement level to temporary storage for each performance space.
- Temporary storage should be highly accessible during performances with room to manoeuvre.
- Two lifts for 12 people to accommodate performer circulation between levels. To be supplemented with staircase.
- Stages should be directly accessible without interference to dressing and rehearsal room.
- Toilets, showers and restrooms must be positioned to coincide with overall layout of services in building to minimise drainage distances.

Design Decisions: Since the performance spaces have been treated in isolation up until this point, this ancillary-spaces core will take shape as the connective tissue that binds these events spaces into a coherent structure. Thus the suitability of this core to serve all spaces within the given site area requires a close interaction between all elements while maintaining a clear separation of the public and private spaces. These ancillary spaces will be multi-level, served by a central vertical circulation system comprised of two personnel lifts, a staircase and fire escape, and a freight lift to transport scenery and props from the basement level delivery area and scenery storage to stage level. The

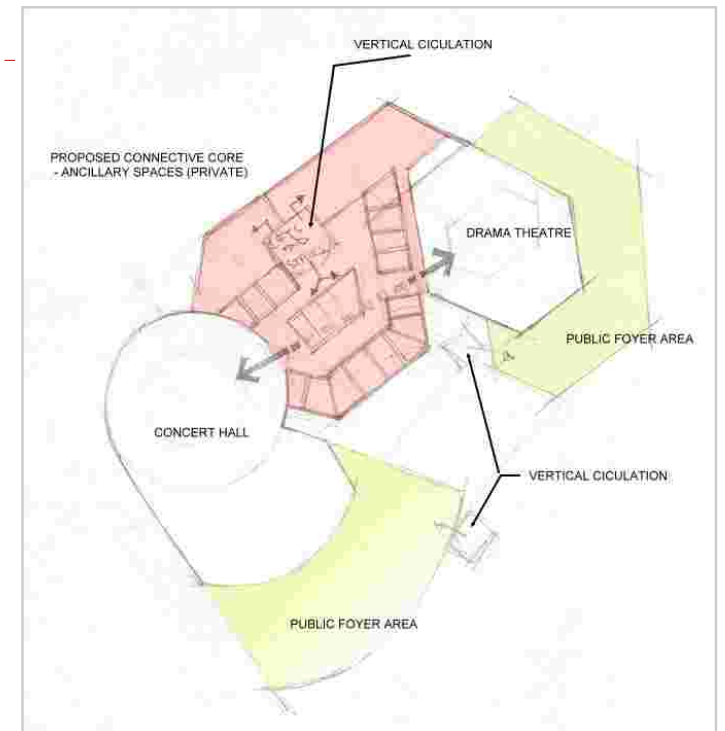


Figure 5.25 Sketch Plan of shared ancillary spaces by main performance spaces. Illustrates separation of public and private areas.

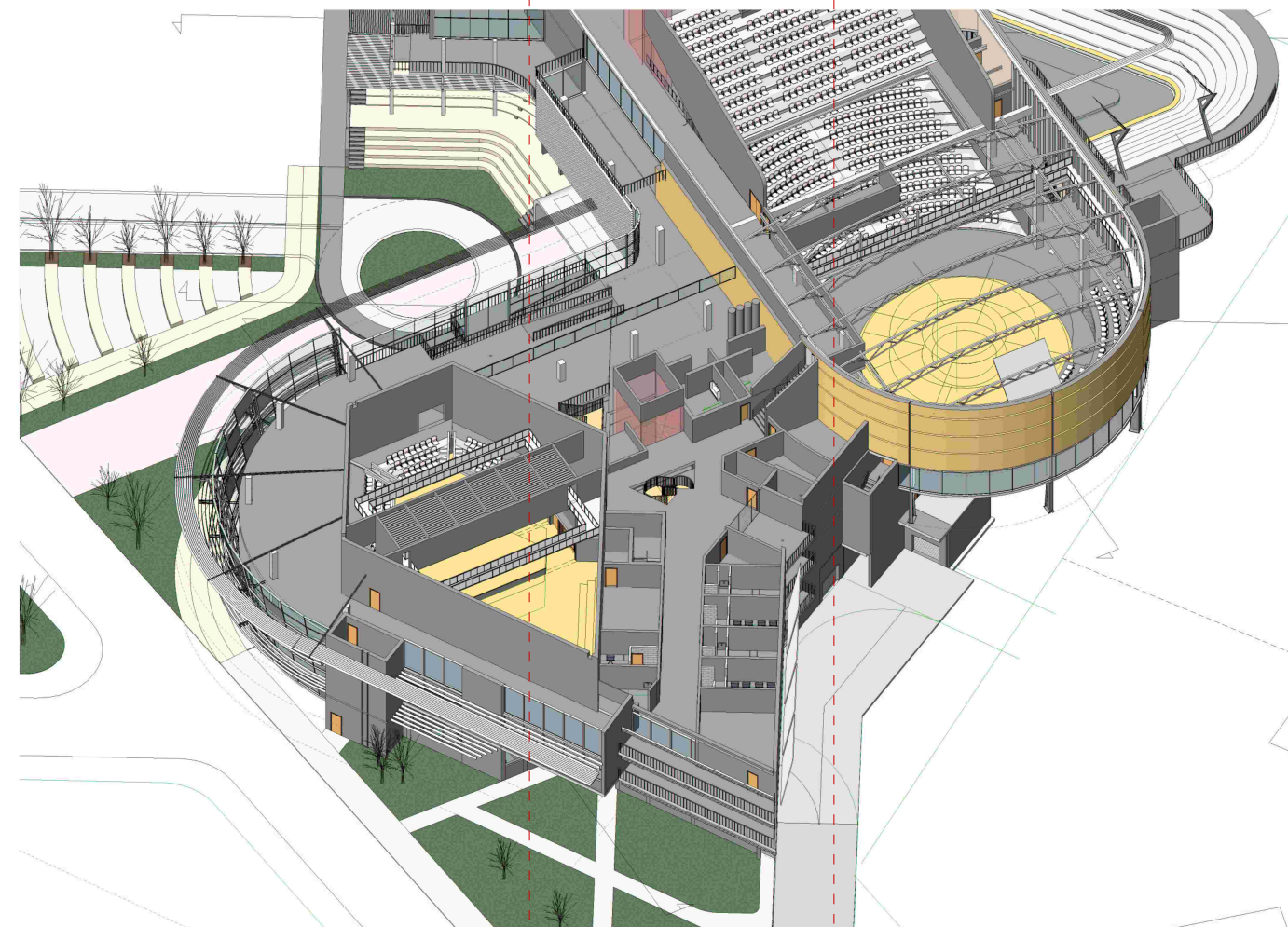


Figure 5.26 Isometric view of layout of ancillary spaces as common space between the principal performance spaces.

5.5. Overall Layout and Arrangement of Spaces

Intentions: The strategy for the overall development is for public, audiences and performers alike to utilise and experience the Centre at all times of the day, whether or not performances are in process. The simultaneous use of space will ensure a strong sense of vitality is maintained throughout the day, keeping the centre alive and full of possibility, therefore positively affecting the surrounding context of Salvokop. Due to the fact that the main internal performance spaces were treated separately in the initial design stage, the building is to be designed with the intention of linking these main elements with a connective tissue characterised by ancillary spaces and circulation systems for the public. The intention is that the building therefore achieves its character through the predominant inclusion of movement in its aesthetic. The main performance spaces will emerge from within this connective tissue in order to make the nature of the building apparent from the exterior, creating a rhythmic system of nodes within the building layout between which the users accommodate themselves.

Requirements and Baseline Criteria:

- Building must supply the means for goods and materials to be delivered directly to material storage via loading bay for re-distribution within the building
- Loading bay must accommodate for goods trucks and be large enough to facilitate turning of these vehicles
- Staff access must be separate from public access and provide means for staff and authorised performers to safely park
- Staff and performer parking must have direct access into ancillary spaces of building
- Main public entry must be within acceptable walking distances – no more than 40 meters - from public parking and have direct visual relationship to adjacent public open space
- Main public access must be prominent and easily accessible
- Access from parking should be on one continuous level and easily traversable by persons with disabilities
- Main public access to building must incorporate an undercover drop-off point (porte cochere) with adequate turning circle for cars
- Access within the site must accommodate emergency vehicles so that medical and safety emergencies within the building may be addressed swiftly and safely without obstruction and difficulty.
- People with disabilities, particularly wheelchairs should be able to access any point in the building without having to negotiate any steps
- Access to and from foyers should be clear and easily appreciated without major dependence on signposting

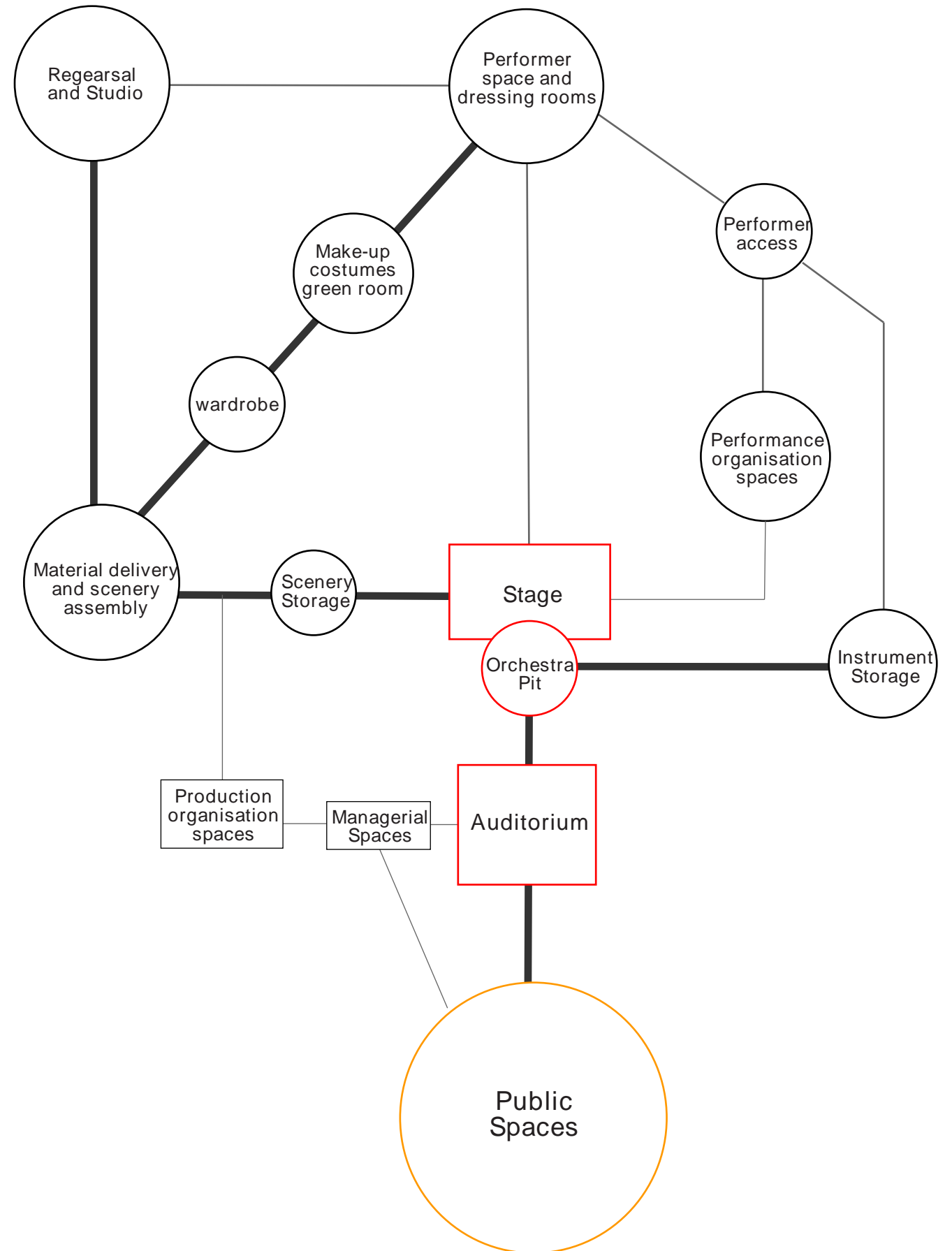


Figure 5.27 Spatial framework from which eventual plan form was derived

Design Decisions:

The strategy for the overall design is one of spatial and functional relationships, thus ultimately determining building form. It becomes clear at an early stage that the optimum locations within the site for service access and main public access are from the north and eastern perimeters respectively. The most significant reason for these choices is that these site edges are the only edges of the site that are bordered by a vehicular roadway – Ceremonial Way. It is important that service access is kept separate from public circulation and access in order not to create disruption and detract from the public experience. Service access from the north is most suitable since this is the lowest point within site extents and therefore reduces sloping distance required for vehicles to reach basement level for delivery and parking purposes. This service access will run parallel to the western border of the site. This access will include a manoeuvring area and loading zone with dimensions equivalent to recommended turning circles of 11,4m radius for goods vehicles. The western edge and façade is the least significant of all building façades since views of the building are restricted due to the neighbouring NZASM housing heritage site. The NZASM heritage site is designed to be introspective with central focus remaining the central circulation space and water feature – the point of intersection of the perpendicular NZASM axes.

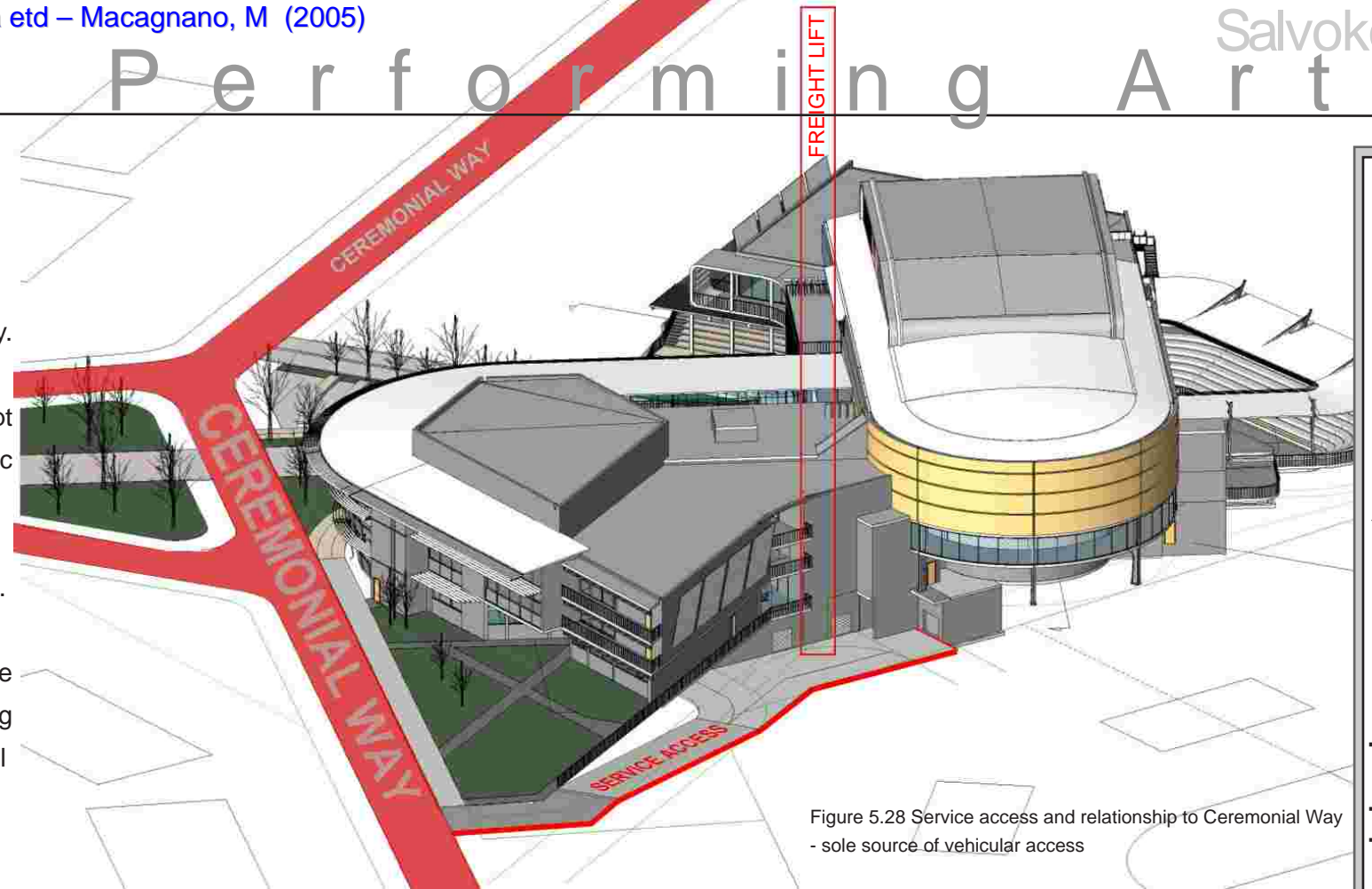


Figure 5.28 Service access and relationship to Ceremonial Way - sole source of vehicular access

First impression of the building should convey effectively the extents to which the public may participate. In this sense, the public may anticipate the extents and nature of the development. Thus a largely transparent façade to the east would reveal the main performance spaces on the interior as they emerge out and above the canopy of the 'connective tissue' that defines the public activity and circulation spaces. Dance studios and a public coffee bar facility will define a portion of the eastern façade, its edge running parallel to the ceremonial way up to Freedom Park. Thus at all times of the day and night, this section may serve as a beacon of activity with rehearsals and free expressions of movement defining the prominent corner that interacts directly with the approach to and from Freedom Park, as well as a scene of relaxation.



Figure 5.29 View towards main entrance from public open space

Reason for a multilevel building edge on the eastern façade is one of proportion and scale. Due to the fact that the Ceremonial Way, on its stretch southwards towards Freedom Park, is widened to over 30 meters to incorporate pedestrian movement and public parking. The scale of this open space may detract from the impact of building as a visual icon for the area. Thus an increased elevation height on this façade would transgress the buffer created by public parking on the building's eastern border and make it possible for the contents and activity of the building to become more apparent to passers-by and regulars in the area. Asserting the Building over the parking buffer is also supplemented by means of accommodating major pedestrian movement up and towards Freedom Park directly on the eastern edge of building footprint.

Emergency vehicle access and under-cover drop-off point shall be integrated as vehicular access from the eastern border which will be taken through the public parking strip on the east. This access will culminate in a turning circle of 9,5m radius whereby vehicles shall exit where they entered. This turning

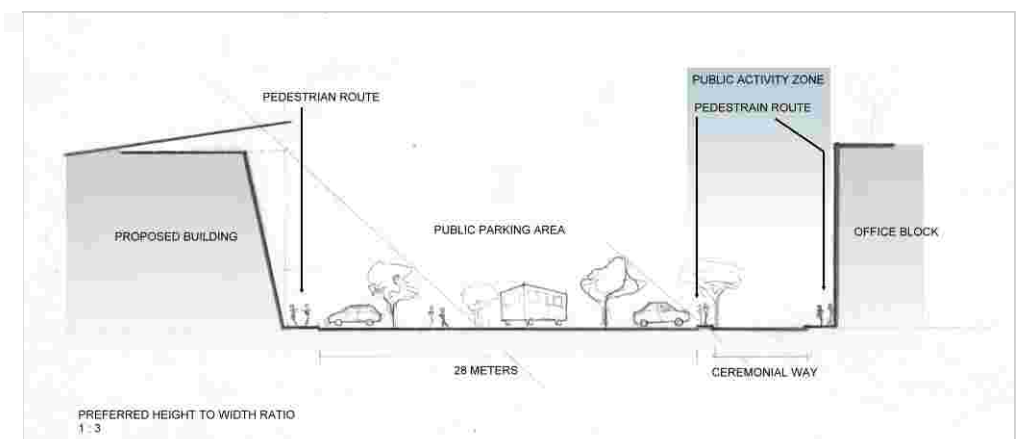


Figure 5.30 Section of height to width ratio of the Ceremonial Way and buildings positioned along it

circle is required to be of adequate dimension to support emergency vehicle turning circles. Access for vehicles within the site is required to be of a minimum distance of 15 meters from the intersection mentioned previously in order to minimise possible congestion of traffic.

This open space shall pronounce the main public access to the building and will also serve as a point of public congregation and outdoor interaction. This space shall also be visually linked to the public open space that serves the blue train station and the major ceremonial way intersection whereby final approach to Freedom Park is begun. Due to the intention to involve this outdoor space in performance events and public recreational activities, the Centre integrates curvilinear public seating into its structure. This eating, with stairs included, extends all the way to first floor level. In effect, this opens up and links the public activities of the Centre on first floor, to those on ground level.

In order to accommodate adequate scenery and material storage for the various performance spaces it is evident that a vertical separation of the main performance spaces is necessary. Thus multiple storage areas shall be positioned above each other linked by freight elevator originating from basement level. Each of these spaces shall directly feed the stage areas of the main performance spaces. This negates the need for internal lift systems within the performance spaces themselves to reach storage areas during performances. This vertical displacement of performing spaces shall be reflected in the ancillary spaces, such as dressing rooms and rehearsal spaces, which are planned over two levels and served by a central lift and staircase core. This multi-level ancillary space core will bridge the distance between the Principal and Secondary Performance Spaces, serving both equally. By elevating these two main performing spaces to first level, the ground floor is freed for public use, and ancillary spaces are thus taken directly out of the scope of public movement. Space below the Principal Performance Space will be left for public use and rehearsal, and designed to exploit the multi level nature of it's the Principal Performance Space's required foyer spaces. Thus a range of double and triple volumes shall be created, each level connected spatially by the revealed slope of the raked seating structure of the concert hall which gradually rises to extend over all foyer and mezzanine levels. Space underneath the Secondary Performance Space will be used to define the Studio Theatre space. The hexagonal shape will thus complement the Secondary Performance Space above, its walls therefore performing a load-bearing role. Thus foyer space for the Studio Theatre, Secondary Performance Space and its gallery shall be positioned one above the other and linked by a common staircase and lift system.

The Outdoor Performance Space is intended to serve as an extension of internal space. Public space on the interior shall be linked to the outside by linear and continuous seating positioned to encircle the outdoor stage. From the inside the outdoor performing space may therefore reveal itself. Position of Outdoor Performing Space is chosen to be the on the Southern Edge of the building. The stage itself shall be a product of the building form, its shape determined by the building edge. The building itself shall extend over the stage in order to provide cover for performers in situations of inclement weather. The seating shall be cut into the ground as a means to negotiate the slope towards the public

green space on the south. In essence the Public Green Space on the south border effectively becomes an extension of audience space as downwards slope of the ground would allow for scores of people to be seated behind the formal seating as provided by the Centre for Performing Arts. Sound propagated from this point will also have little effect on nearby buildings and residences as it is required to travel extensive distances over the soft landscape of the Public Green Space. Noise from the adjacent Ceremonial Way and related traffic, which would be detrimental to performances, would therefore also be minimised since the outdoor performing space is effectively shielded from the road by the building for which envelopes it.

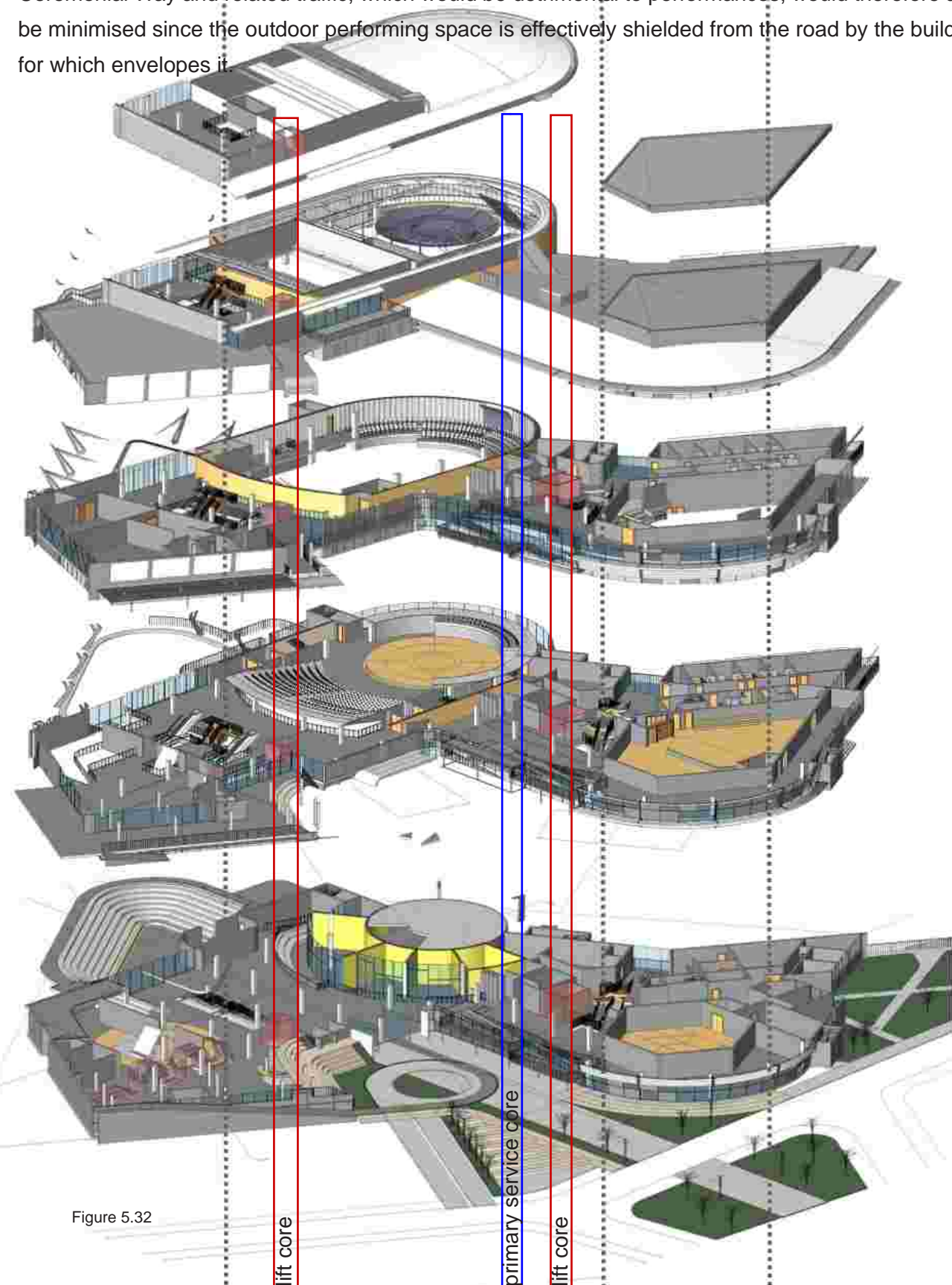


Figure 5.32

5.6. Movement Systems and Occupancy

Due to the fact that the building is in the position to be used during most hours of the day and night, periods of extensive usage may be plotted in anticipation of increased mechanical climate control, as well as a decisive tool in the management of public and performer movement systems. The relevant movement paths are presented graphically, illustrating the intended relationship between all contributing factions of the Centre, namely: performers, public and staff.

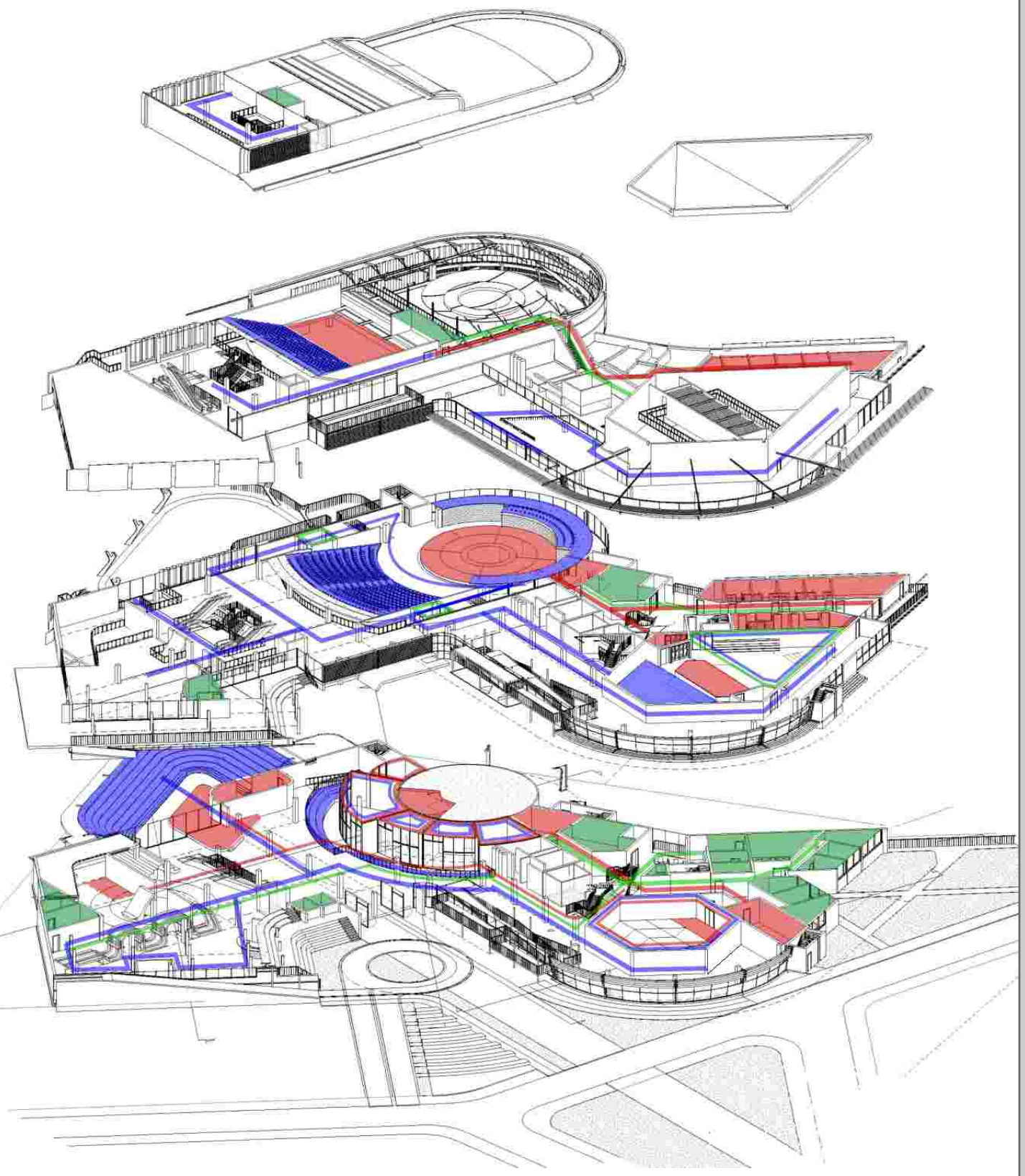
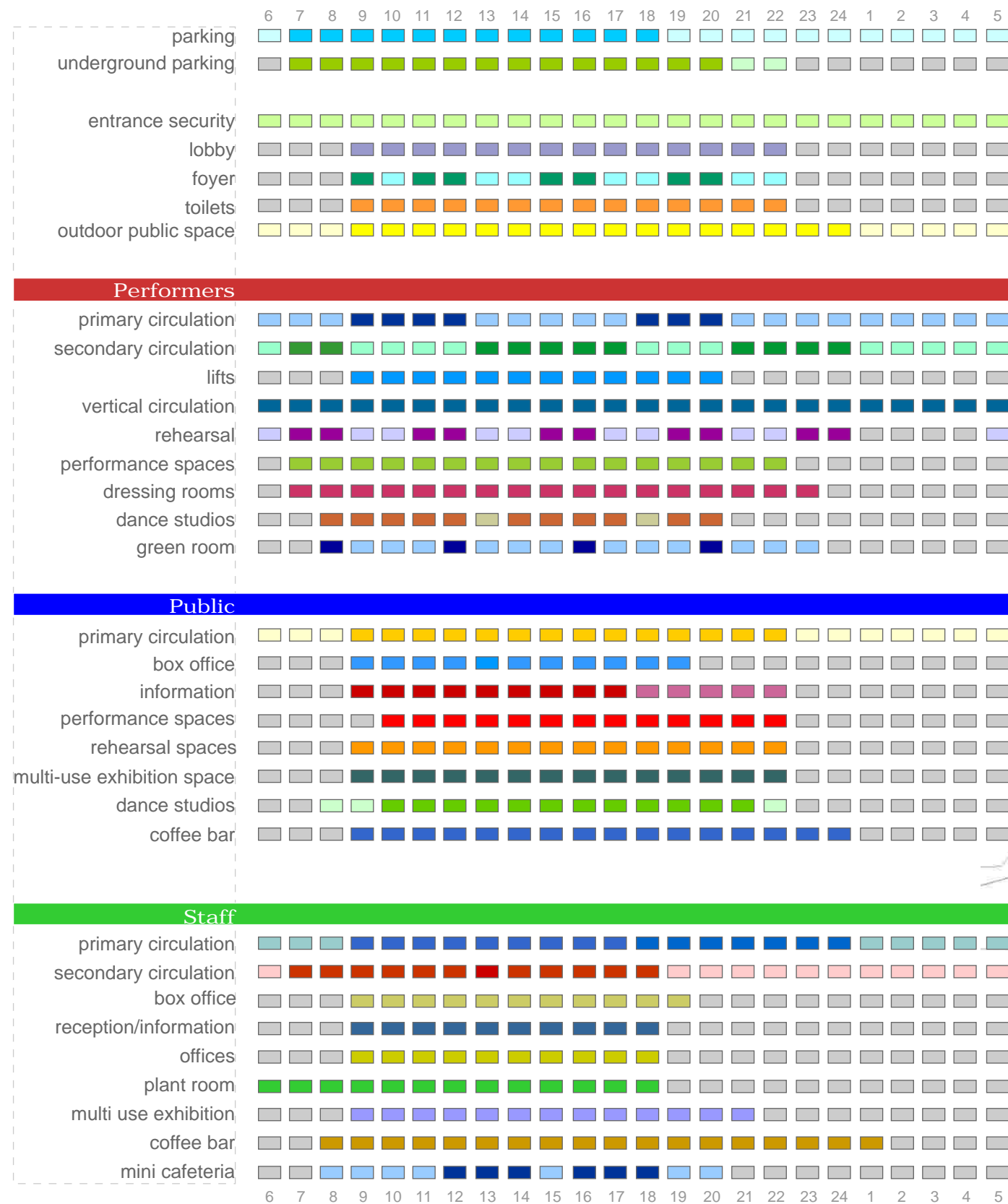


Figure 5.33 User movement patterns, illustrates the inter-relationships of occupants within structure

5.7. Aesthetic Considerations and Objectives

As stated already, it is the intention of this building to be representative of its context. It can be observed however that the context is in line for some drastic changes with the onset of the Salvokop Redevelopment Framework. Apart from the old Spoornet workers' housing that makes up the residential component of Salvokop, the only provided basis for aesthetic inspiration is the Initial Stage of Development for Freedom Park. A predominant use of stone and other locally available materials in the curvilinear design of its footpaths and seating areas can be observed, creating a scene of footpaths etched and carved into the form of the hill.

The intention of the Centre for Performing Arts to reveal its interior to the public that are enjoying its outdoor recreation spaces or simply passing by is fundamental to its aesthetic. It has already been mentioned that the building seeks to achieve its character through the predominant inclusion of human movement in its aesthetic, and thus the building shall be designed to contain a predominantly transparent and visually permeable façade where areas of public focus are concerned.

Due to the irrefutable scale that this building is required to be, its scale is quite substantially diminished against the backdrop of the hill, which itself is typified by a staggered approach leading to a final and continuous steep slope to its summit. The building is multi-levelled, with all levels revealed to the public through its transparent facades.

The building has been designed to portray movement and natural progression, In order to represent three-dimensionally and in concrete terms the concept of what performance and music seeks to achieve.

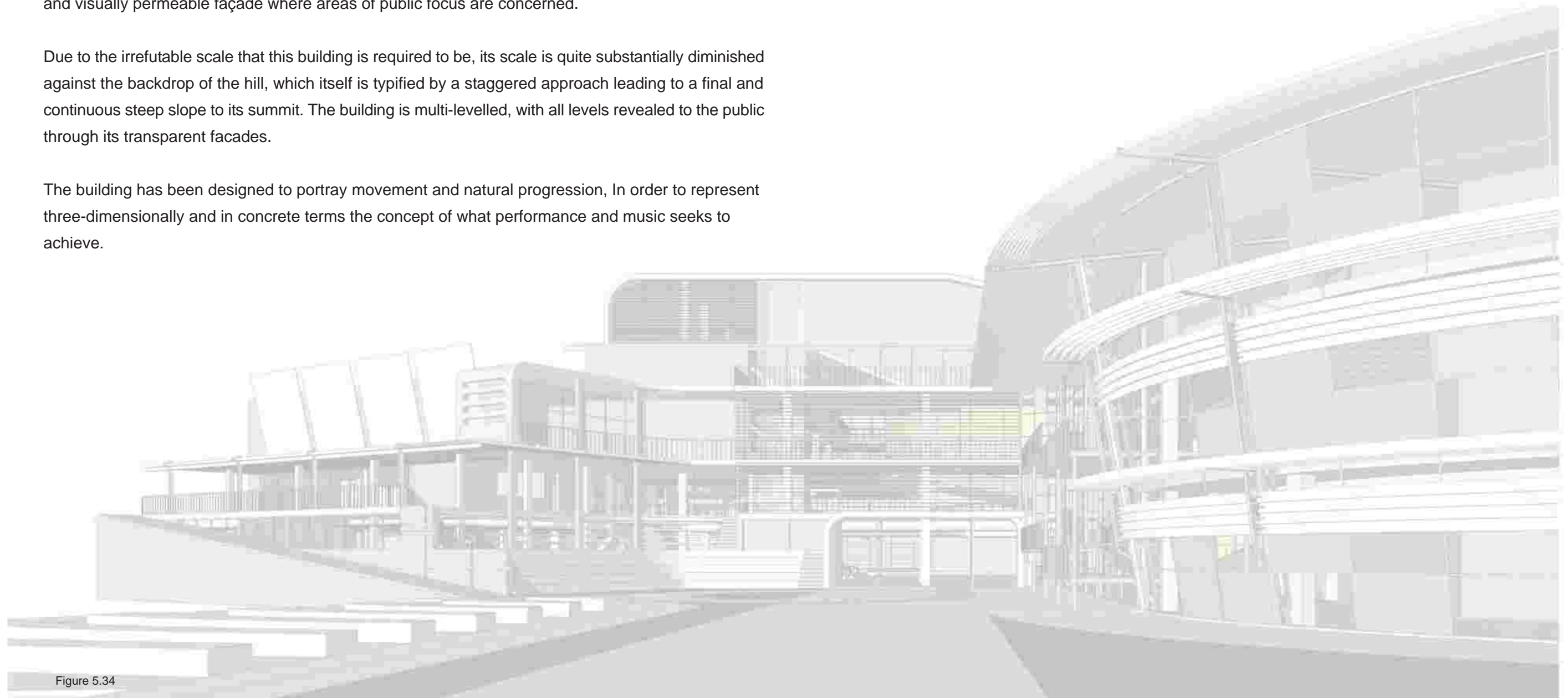


Figure 5.34

5.8. Revisions and Amendments to the Urban Design

The Centre for the Performing Arts has been designed to include the public open space planned for the Ceremonial Way as an extension of its own public space, and vice-versa. Thus adopted in the brief of this design exercise is to include the public open space of the Ceremonial Way, so that a cohesive progression of spaces may be achieved, further aiding the intention of Salvokop's urban designers to enhance the pedestrian landscape of the area. Thus treatment of the transition between the public space of Ceremonial Way and that of the Centre is of utmost importance. This is due to the fact that a busy street, as in the intended case for the Ceremonial Way, may provide an unaccommodating barrier to the natural progression of pedestrians between public spaces.

The public open space of the Ceremonial Way can be described as an island of pedestrian activity. It has been

originally designed to provide for pedestrians and locals a venue to be at peace, as well as a first impression and overflow space from the Blue Train Station on its eastern edge. This space is however surrounded by roads on all sides, and does not make it the most convenient of spaces to attract the crowds. On its own therefore its position lacks much merit, but as an integrated feature and extension of space from within the Centre for Performing Arts, its existence is far more substantiated. What is required from this space is therefore:

- Extensive and fixed public seating / street furniture
- Tree cover and other forms of shade
- Visual icon to exploit the visual links that demarcate it as an important node on the Ceremonial Way
- Accessibility on all levels – no irregular paving, wheelchair-friendly slopes, clearly demarcated steps
- Methods of slowing traffic to ensure safety for pedestrians
- Pedestrian crossings, priority placement

Modification to the urban design of the proposed Salvokop Development Framework is thus restricted to two areas: The parking strip which lies to the west of Ceremonial Way, and the public open space as previously discussed. The final layout of the public open space is thus simply designed - it is not the intention of the Centre for the Performing arts to dominate the landscape around, but simply interact and compliment it. The main pedestrian axis between the future Blue Train Station and the site is clearly defined by a paved surface, accommodating free movement of people between the spaces of interest. Shaded and soft landscaping (lawns) for the public open space of the Ceremonial Way contains a multitude of street furniture for an abundance of people to use and relax upon while watching the commuters and public alike pass before their eyes.

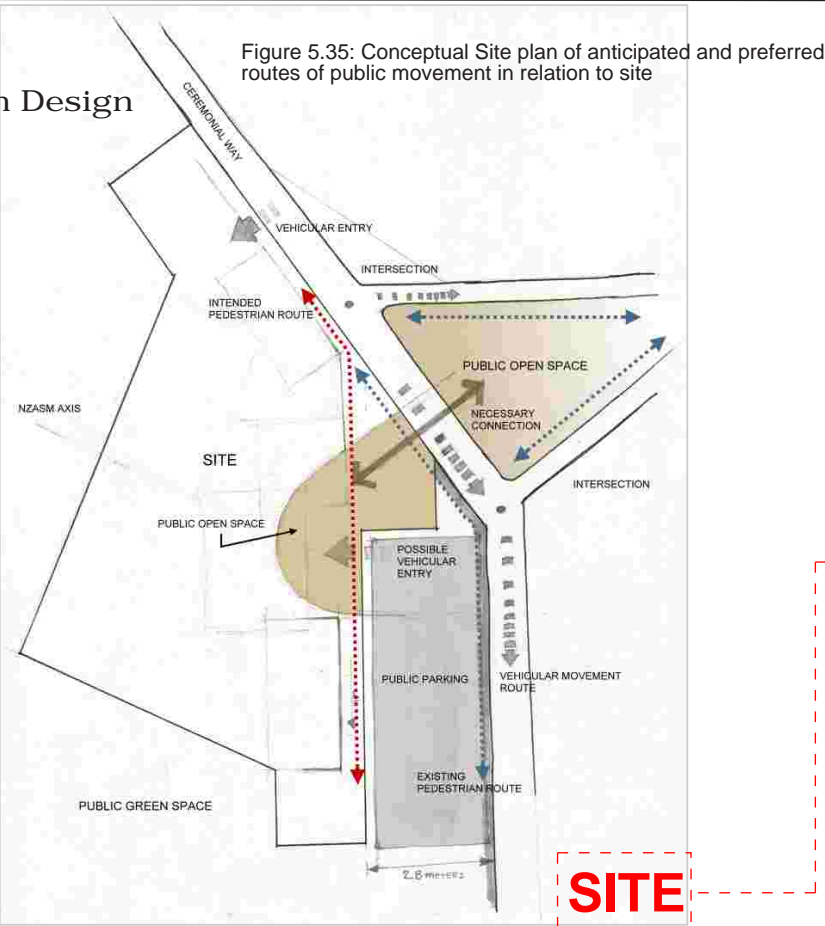


Figure 5.35: Conceptual Site plan of anticipated and preferred routes of public movement in relation to site

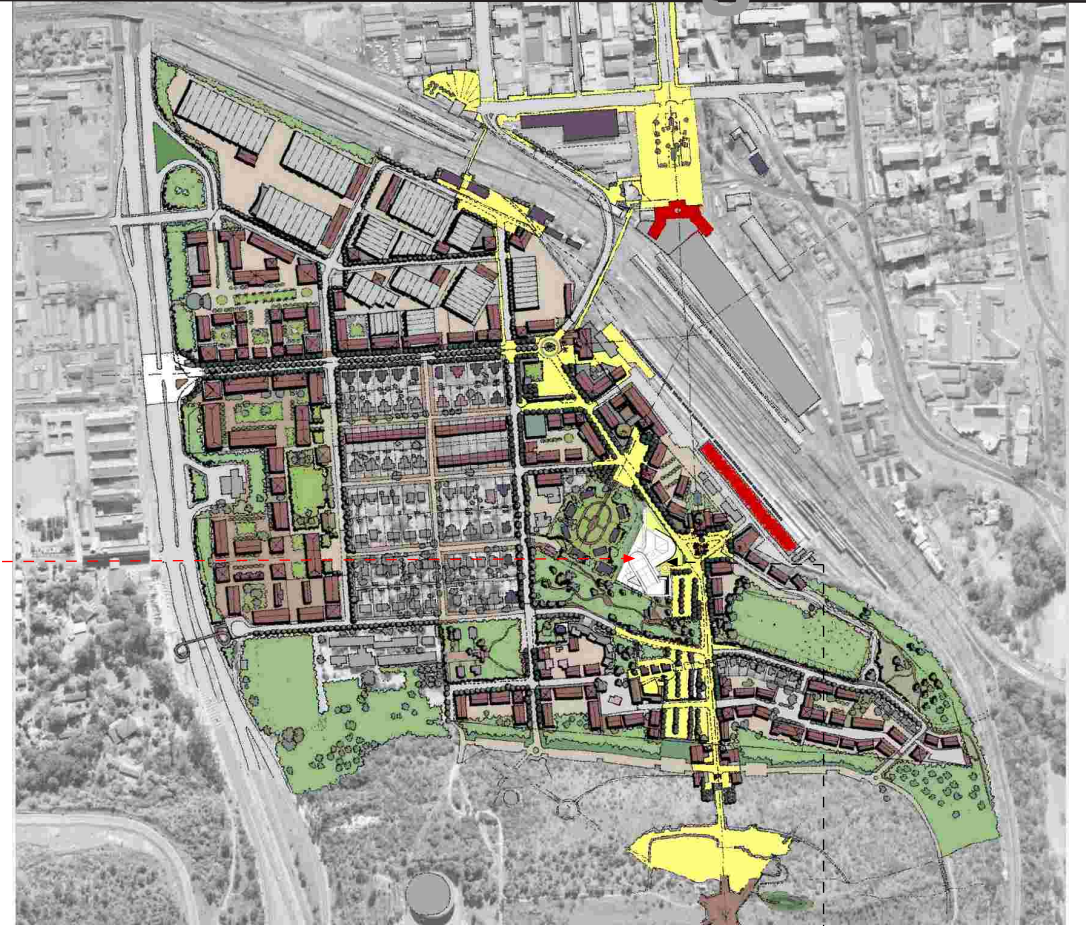


Figure 5.36

incorporation of urban fabric into site

site perimeter 'blurred' to negate beginnings and ends, only shared spaces exist

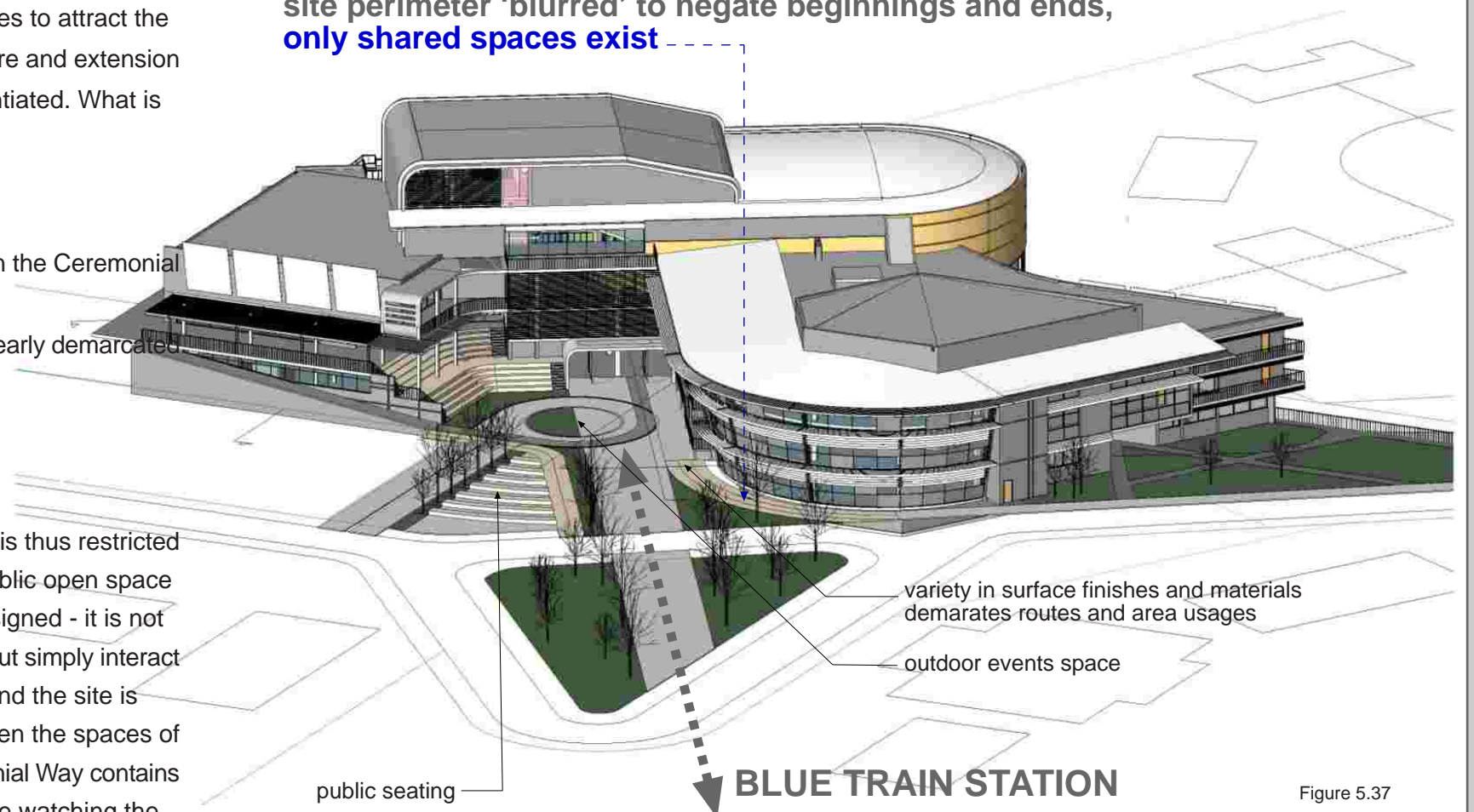


Figure 5.37

5.9. NZASM Heritage Housing Design Considerations

The NZASM Heritage Housing complex to the west of the site for the Centre for the Performing Arts, as has already been stated in the previous chapter, is ear-marked for preservation and conversion into a public information centre. The cluster can be physically defined as single story residential-built dwellings of varying orientation. The NZASM buildings are all inwardsly facing - relatively speaking according to the site - and are positioned around an almost elliptical pathway with a central water feature. The NZASM Heritage Housing Complex is regarded with great importance by the Salvokop Development Framework, not only as a contributor to the framework in terms of heritage tourism, but also as a form-giver to the proposed urban design for the immediate area. The Complex's principal influence are its two prominent axes that are outlined dramatically by the layout of its central pathways. The principal axis runs directly through the main entrance to the complex on the north-east of the site, and proceeds in a south-westerly direction. It can be observed that the intersection of this axis and the axis of the Ceremonial Way has been chosen for positioning of a public open space. Although the secondary axis, running perpendicularly to the primary axis, is also deemed to be respected and responded to, the SDF does not provide a significant or obvious response to this. This secondary axis is of principal concern to the Centre for the Performing Arts, as the provided pictures illustrate.

It must be said that the role of this axis is somewhat terminated at the point where it coincides with the entrances of the relevant NZASM houses situated on the east and west extremities of the elliptical pathway. beyond this houses no pedestrian movement or need of such movement occurs, or has ever occurred. What is important with regards to this axis is the nature of movement of the public upon approaching the respective NZASM houses, as well as a necessity for higher ordering and respect between neighbouring sites. These factors make the relevance of this axis impossible to ignore.

With regards to the planning of the Centre, the secondary axis of the NZASM housing complex is directly lined up with the 'heart' of the building. Centrally located, this area of the building is the point of relationship between the two prominent geometries of the Primary and Secondary Performance spaces and their relevant foyer spaces. This axis therefore pronounces the point of cohesion between these public and performer spaces, giving significance to the position of the building on elevation where there is a shift in volumetric scale.

Scale is also of importance in the evaluation of the visual relationship between these sites to the passer-by. On the one hand the NZASM Heritage Housing complex is single story, on the other the Centre for Performance Arts is necessarily multi-storied in nature. A natural progression of scale and facade treatment is required if the NZASM buildings are not to be overpowered by the Centre. Thus the Centre has intentionally divided its vertical faces and external walls horizontally in order to soften the verticality of its facades. The Principal Performance Space has been designed to be of prominence from westerly views, but this too has been given horizontal emphasis rather than vertical. The volume could easily have extended continuously to ground level, but instead a recession in the form of an overhang supported on columns reduces the vertical scale of this volume. Since user perceptions from within the NZASM Heritage Housing complex are at quite an intimate scale due to the close proximity of the houses to one another and the footpaths, this effectively retains the houses as principal focus of attention, and through the magic of perspective, the houses are retained at a comparable scale to the Centre in the background. None-the-less, a method for negotiating the transition between the NZASM complex and the Centre is required, to serve both as buffer, and intermediary purveyor of scale. This buffer has been provided in the form of medium to high-rise trees, rising higher than the NZASM complex, yet lower than the Centre. It is between these trees that the Centre reveals itself in small increments, revealing its presence but not interfering in the internal workings of the NZASM Heritage Housing complex.

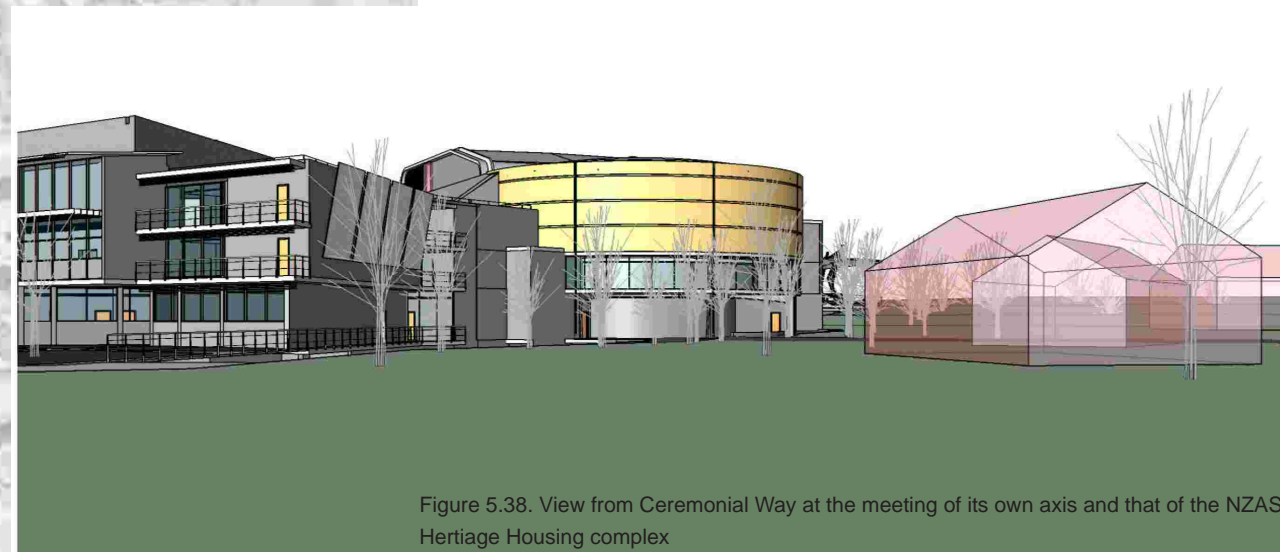


Figure 5.38. View from Ceremonial Way at the meeting of its own axis and that of the NZASM Heritage Housing complex

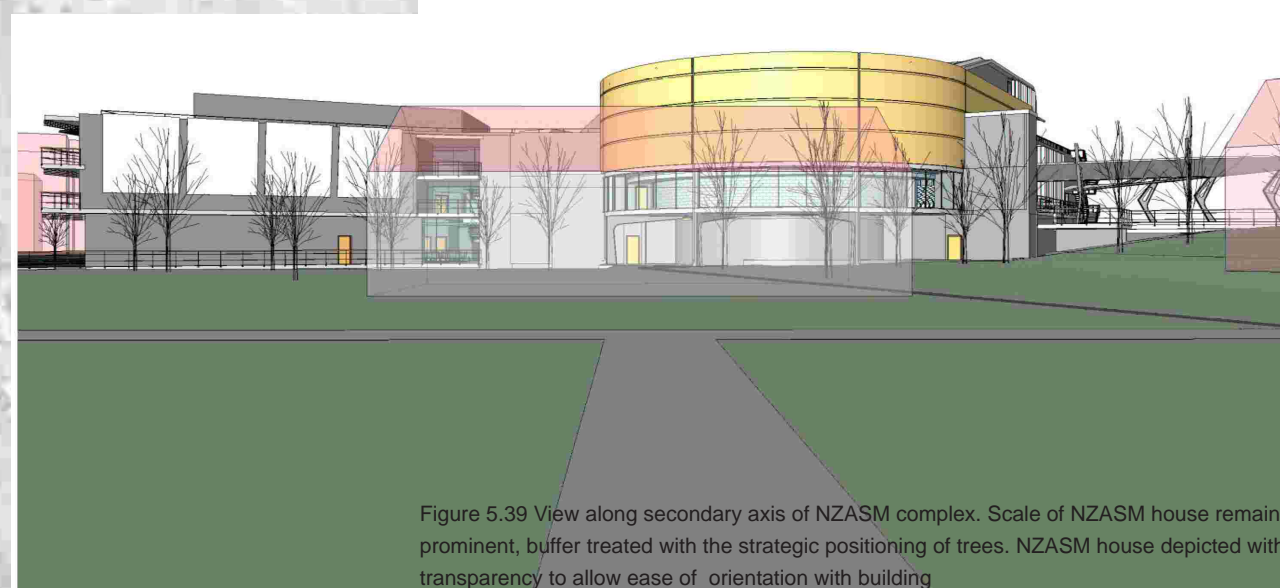


Figure 5.39 View along secondary axis of NZASM complex. Scale of NZASM house remains prominent, buffer treated with the strategic positioning of trees. NZASM house depicted with transparency to allow ease of orientation with building

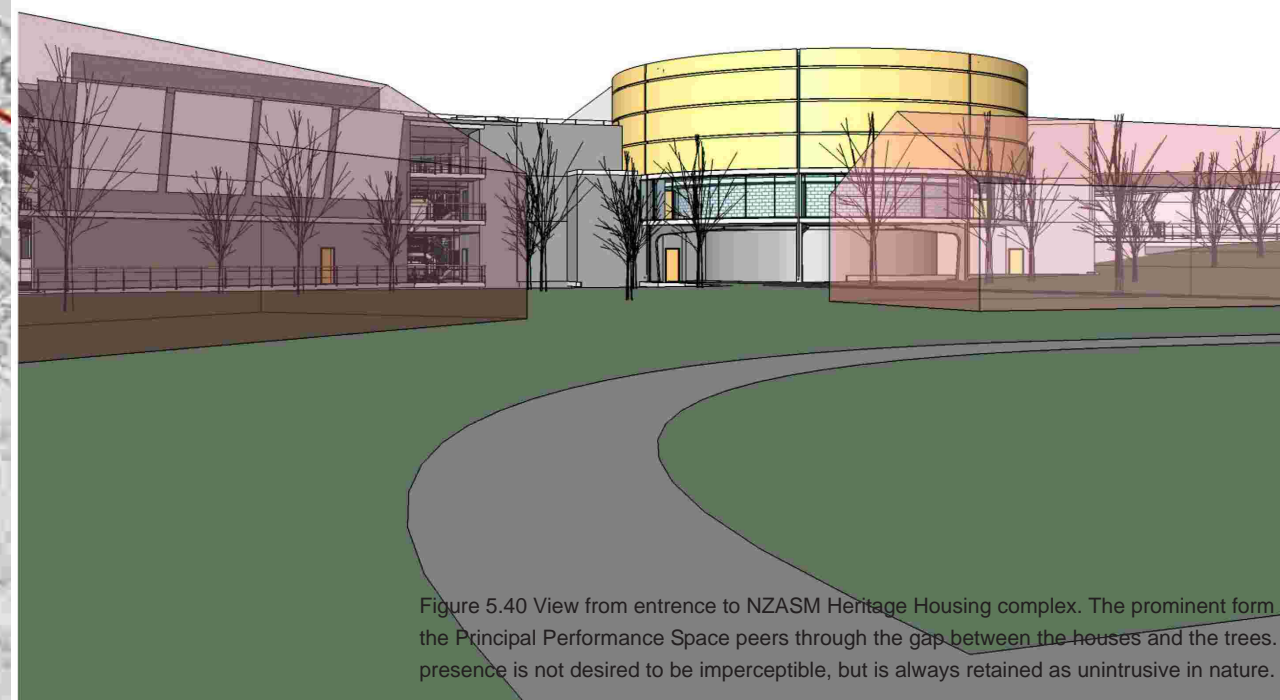


Figure 5.40 View from entrance to NZASM Heritage Housing complex. The prominent form of the Principal Performance Space peers through the gap between the houses and the trees. Its presence is not desired to be imperceptible, but is always retained as unintrusive in nature.

5.10. Development Management System

The Department of Arts and Culture is the main beneficiary for construction, in the hopes of bettering public image and constructing a high-profile development that is contributes to public well-being. Funding is deemed to be directed from the national treasury or directed from international governments though established partnerships. The land, which has been subdivided into many sites, is currently owned by Transnet who are willing to enter into agreements of sale.

The Department of Arts and Culture Strategic Plan aims to develop and preserve South African culture in order to ensure social cohesion and nation building. The Department's mission involves improving the economic opportunities for South African Arts and Culture nationally and globally through mutually beneficial partnerships, as well as ensuring development of archival and information resources of the nation to empower citizens through full and open access to these facilities. Relationships with International partners such as the South Africa Swedish partnership and Flemish partnership provides financial (at least R70 million over the last three years) and HRD resources to supplement the financial support for the Arts (www.dac.org.za)

In order for this project to be successful in the long-term, it is imperative that backing is obtained from the Government. This backing thus has some guarantee of delivery, especially when required for purposes of construction, maintenance, salaries and expansion costs.

Once constructed, it is the intention of the client that an advisory board/ steering committee with executive power be established for administrative purposes regarding the development – positions to be negotiated from project inception. These positions may be considered positions of prestige, nominated persons to convene at least once a month. This advisory board will have the power to attract and direct funding in the interests of the development, and the position of chairman to be rotated on a periodic basis. A sustained management force of employees paid and hired by the DAC will concern themselves with the day-to-day administration and management within the guidelines as decided by the advisory board.

NGO involvement is encouraged, and required by means of government policy towards such organisations – hence the establishment of such organisations as the Transnet Foundation, The Ford Foundation and so forth. Such funding may thus be put to use in the organisation of exhibitions, events and equipment for the facilities. All profits obtained from the success of such events may then be allocated towards a trust account and used in the improvement of the facility.