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Basis of Design Outline

1. Introduction

1.5 - Project Overview

Stoneybatter Place is a state-of-the-art Purpose-Built Student Accommodation (PBSA) located in the historic area of Stoneybatter, Dublin. The development comprises 142 beds, designed to provide high-quality living spaces for students. The project integrates modern design with the preservation of historical elements, creating a unique and vibrant living environment. The primary purpose of Stoneybatter Place is to offer premium student accommodation that meets the needs of contemporary students while enhancing the historical and cultural fabric of the Stoneybatter area. The project aims to provide a safe, comfortable, and engaging living space that supports students' academic and personal growth.

1.6 – Program Requirements

1.6.1 Space Needs

The residential component includes a total of 142 beds, comprising a mix of en-suite rooms and studio apartments. The common areas are designed to foster community and provide versatile spaces for social interaction, study, and relaxation. These include a central courtyard with landscaped greenspaces, a main communal area with tiered seating that can be converted into an amphitheater, and various living room and study areas with breakout spaces, a presentation area, and a music area. The rooftop gardens are equipped with high-end furniture, extensive landscaping, pergolas for shelter, and amenities such as table tennis and yoga areas. Wellness and leisure facilities are a key feature, with a Wellness Hub that includes a gym with modern fitness equipment, a yoga/stretching area, and a living mass wall to bring a touch of nature indoors. Support and service areas include high-efficiency laundry facilities, conveniently located for easy access, and a newly constructed Gatehouse with an archway that enhances both functionality and aesthetic appeal.

1.6.2 Functional Relationships

The functional relationships within Stoneybatter Place are designed to ensure seamless interaction between different spaces. Student bedrooms and apartments are located in quieter areas for privacy, with en-suite bathrooms directly accessible from each room. Communal spaces, such as the central courtyard and main communal area, are centrally located to serve as the heart of the community, while living rooms and study areas are distributed throughout the building for convenience. The Wellness Hub, including the gym and yoga area, is centrally positioned to encourage regular use. Laundry facilities are easily accessible yet discreetly placed to minimize disruption. The Gatehouse at the main entrance ensures security, and art installations are strategically placed in high-traffic areas to enhance aesthetics.

1.6.3 Occupancy Loads

The expected occupancy loads for Stoneybatter Place are designed to accommodate the needs of its residents and ensure efficient use of space. The residential areas include 142 beds, with a mix of en-suite rooms and studio apartments. Communal areas, such as the central courtyard and main communal area, are designed to support large gatherings and social events, with the main communal area capable of hosting up to 50 people. The Wellness Hub, including the gym and yoga/stretching area, is expected to accommodate up to 20 users at a time. The rooftop gardens and living spaces are designed for flexible use, supporting both small group activities and larger social events. Laundry facilities are equipped to handle the needs of all residents, ensuring efficient and convenient access. These occupancy loads ensure that Stoneybatter Place can comfortably support its residents while providing ample space for social interaction and wellness activities.

1.7 – Building Codes: Specify all applicable building codes, regulations, and industry standards.

1.3.1 Part A (Structure)

1.3.2 Part B (Fire Safety)

1.3.3 Part E (Sound)

1.3.4 Part F (Ventilation)

1.3.5 Part G (Hygiene)

1.3.6 Part H (Drainage and Wastewater Disposal)

1.3.7 Part J (Heat Producing Appliances)

1.3.8 Part K (Stairways, Ladders, Ramps, and Guards)

1.3.9 Part L (Conservation of Fuel and Energy)

1.3.10 Part M (Access and Use)

1.8 – Zoning Compliance

The Stoneybatter Place project complies with all relevant zoning regulations and planning policies outlined in the Dublin City Development Plan. The site is zoned for residential use, permitting the development of student accommodation. The project adheres to regulations regarding land use, building height, density, setbacks, site coverage, and parking. It includes landscaped open spaces and sustainable design features, aiming for a BREEAM Very Good rating. The development supports community infrastructure with communal areas, wellness facilities, and cultural spaces, ensuring it meets legal requirements while enhancing the urban environment and providing high-quality student housing.

2. Design Philosophy and Objectives

2.1 – Design Intent

The design intent for Stoneybatter Place centers on creating a high-quality, sustainable, and vibrant living environment that respects the historical context of the site while meeting the needs of modern students. The overarching design philosophy integrates contemporary architectural elements with the preservation of historical features, such as the original cobblestones and courtyard. This approach ensures a seamless blend of old and new, fostering a sense of community and belonging. The project aims to achieve a BREEAM Very

Good rating and a 3-star Fitwel® Certification, emphasizing sustainability and well-being. Communal spaces, wellness facilities, and cultural elements are thoughtfully incorporated to enhance the living experience, promote social interaction, and support the holistic development of residents. This design philosophy aligns with the project's goals of providing premium student accommodation that is both functional and aesthetically pleasing, while contributing positively to the urban fabric of Dublin.

2.2 - Guiding Principles

The guiding principles for the design of Stoneybatter Place emphasize innovation, tradition, and community integration. The project aims to blend contemporary design with the preservation of historical elements, ensuring a respectful nod to the site's heritage. Innovation is key, with sustainable building practices and modern amenities enhancing the living experience. Community integration is fostered through thoughtfully designed communal spaces that encourage social interaction and a sense of belonging. The design also prioritizes the well-being of residents, incorporating wellness facilities and green spaces. These principles ensure that Stoneybatter Place not only meets the functional needs of students but also enriches the local community and environment.

3. Site Information and Development

3.1 – General Site Development

The general site development for Stoneybatter Place focuses on maximizing the use of the historic courtyard while integrating modern amenities and sustainable features. The site layout includes an L-shaped building that fits within the courtyard, preserving original cobblestones and enhancing the historical character. Key elements include a new Gatehouse for secure access, landscaped greenspaces, and rooftop gardens designed for year-round use. Communal areas are strategically placed to foster social interaction and community engagement. The development also incorporates sustainable practices, aiming for a BREEAM Very Good rating, with features such as green walls, energy-efficient systems, and smart sensors for monitoring resource usage. This approach ensures a harmonious blend of tradition and innovation, creating a vibrant and sustainable living environment for students.

3.1.1 Location Details: Provide the site's address, size, and surrounding context

Stoneybatter Place is located at Rope Walk, Stoneybatter, Dublin, Ireland. The surrounding context includes a mix of residential and commercial properties, contributing to a vibrant urban environment. The area is well-connected, with easy access to public transportation, educational institutions, and local amenities. The development aims to enhance the historical character of Stoneybatter while providing modern, high-quality student accommodation that supports the needs of its residents and the broader community.

3.1.2 Existing Conditions: Describe current site conditions, including topography, vegetation, and any existing structures

The existing conditions at the Stoneybatter Place site include a historic courtyard characterized by original cobblestones, which have been preserved and reintroduced into the development. The topography of the site is relatively flat, facilitating easy construction and accessibility. Vegetation on the site is minimal,

with plans to introduce extensive landscaping as part of the development. Existing structures include remnants of historical buildings, which have influenced the design to maintain the site's heritage. These conditions provide a unique opportunity to blend historical preservation with modern student accommodation, enhancing the overall character and functionality of the site.

3.2 – Landscaping Strategies

The landscaping strategies for Stoneybatter Place focus on enhancing the historical and aesthetic value of the site while promoting sustainability and resident well-being. The design includes the preservation and reintroduction of original cobblestones in the historic courtyard, creating a visually appealing and historically significant space. Extensive landscaping will be introduced, featuring a variety of plants and greenery to create serene and inviting outdoor areas. The rooftop gardens will be equipped with high-end furniture, pergolas for shelter, and amenities such as table tennis and yoga areas, providing year-round usability. Green walls and other sustainable features will be incorporated to improve air quality and contribute to the building's BREEAM Very Good rating. These strategies aim to create a harmonious blend of natural and built environments, fostering a vibrant and sustainable community space for residents.

3.3 – Constraints and Opportunities: Highlight any site-specific challenges or advantages

The Stoneybatter Place site presents both constraints and opportunities that influence the design and development process. One of the primary challenges is the preservation of the historic courtyard and original cobblestones, which requires careful integration into the new construction. The relatively flat topography simplifies construction but limits natural drainage options, necessitating innovative water management solutions. The minimal existing vegetation offers a blank slate for extensive landscaping, enhancing the site's aesthetic and environmental value. The site's central location in a vibrant urban area provides excellent access to public transportation, educational institutions, and local amenities, making it an attractive location for student accommodation. These factors collectively shape the development strategy, balancing the need to preserve historical elements with the opportunity to create a modern, sustainable living environment.

4. Architectural Elements

4.1 - General architectural strategy overview

The general architectural strategy for Stoneybatter Place focuses on harmonizing modern design with the site's historical context to create a functional, aesthetically pleasing, and sustainable student accommodation. The design integrates contemporary architectural elements with the preservation of historical features, such as the original cobblestones and the historic courtyard. The building's L-shaped layout maximizes space within the confined courtyard, while the new Gatehouse enhances both security and visual appeal. Communal spaces, including landscaped greenspaces and rooftop gardens, are designed to foster community interaction and provide year-round usability. Sustainable practices are central to the strategy, aiming for a BREEAM Very Good rating through the use of energy-efficient systems, green walls, and smart sensors. This approach ensures that Stoneybatter Place not only meets the functional needs of its residents but also contributes positively to the urban fabric and environmental sustainability of Dublin.

4.2 - Aesthetic Guidelines: Define the desired architectural style, such as blending historical and modern elements.

The aesthetic guidelines for Stoneybatter Place emphasize a harmonious blend of historical and modern architectural elements to create a visually appealing and contextually sensitive student accommodation. The design seeks to preserve and highlight the site's historical features, such as the original cobblestones and the historic courtyard, while integrating contemporary materials and design techniques. The building's exterior will feature a mix of traditional and modern finishes, ensuring a seamless transition between the old and new. Interior spaces will be designed with a modern aesthetic, incorporating high-quality finishes, innovative storage solutions, and bespoke artwork by local artists. This approach aims to create a unique and engaging environment that respects the site's heritage while providing a functional and stylish living space for students.

4.3 - External Walls

The external walls of Stoneybatter Place are designed to reflect a blend of historical and contemporary architectural styles, ensuring both aesthetic appeal and functional performance. The design incorporates traditional materials, such as brick and stone, to harmonize with the historical context of the site, while integrating modern elements like large windows and sleek metal accents to provide a contemporary touch. The walls are constructed to meet high standards of thermal efficiency and durability, contributing to the building's sustainability goals and aiming for a BREEAM Very Good rating. Additionally, green walls are included to enhance the building's environmental performance and aesthetic value. This approach ensures that the external walls not only complement the surrounding urban fabric but also support the project's overall objectives of sustainability and modern living.

4.4 – Internal Walls and Interior Design Strategy

The internal walls of Stoneybatter Place are designed to provide both functionality and aesthetic appeal, aligning with the overall design philosophy of blending historical and modern elements. These walls will be constructed using high-quality materials to ensure durability and sound insulation, creating a comfortable living environment for residents. The design incorporates modern finishes and colors to create a bright and inviting atmosphere within the living spaces. Additionally, the internal walls will feature bespoke artwork by local artists, adding a unique and culturally rich element to the interiors. This approach ensures that the internal walls not only meet practical requirements but also enhance the overall aesthetic and ambiance of the student accommodation.

4.5 – Building Materials

The building materials for Stoneybatter Place are carefully selected to balance durability, sustainability, and aesthetic appeal, aligning with the project's design philosophy. The external walls will feature a combination of traditional brick and stone to respect the historical context, complemented by modern materials such as metal accents and large glass windows to provide a contemporary touch. Internally, high-quality materials will be used to ensure durability and sound insulation, with finishes that create a bright and inviting atmosphere. Sustainable materials, including recycled content and energy-efficient components, will be prioritized to support the building's BREEAM Very Good rating. Additionally, green walls and other eco-friendly features will be integrated to enhance

environmental performance and visual appeal. This thoughtful selection of materials ensures that Stoneybatter Place is both functional and aesthetically pleasing, while also meeting sustainability goals.

4.6 – Floors

The flooring for Stoneybatter Place is designed to combine durability, functionality, and aesthetic appeal, in line with the project’s overall design philosophy. High-quality, sustainable materials will be used throughout to ensure long-lasting performance and ease of maintenance. In communal areas and high-traffic zones, durable materials such as polished concrete or high-grade vinyl will be employed to withstand heavy use while providing a modern look. Residential units will feature comfortable and stylish flooring options, such as engineered wood or high-quality laminate, to create a warm and inviting atmosphere. Additionally, the use of carpets in specific areas, like study rooms and lounges, will enhance acoustic performance and comfort. This thoughtful selection of flooring materials ensures that all spaces within Stoneybatter Place are both functional and visually appealing, contributing to a cohesive and high-quality living environment.

4.7 - Doors and Windows

The doors and windows for Stoneybatter Place are designed to enhance both functionality and aesthetic appeal, aligning with the project’s blend of historical and modern elements. Doors will be constructed from high-quality, durable materials to ensure security and longevity, with designs that complement the overall architectural style. Internal doors will feature modern finishes and soundproofing to provide privacy and comfort. Windows will be large and strategically placed to maximize natural light and provide expansive views, contributing to a bright and inviting atmosphere. Energy-efficient glazing will be used to improve thermal performance and reduce energy consumption, supporting the building’s sustainability goals. This thoughtful selection and placement of doors and windows ensure that they not only meet practical requirements but also enhance the visual and environmental quality of the living spaces.

4.8 – Equipment and finishes strategy

The equipment and finishes strategy for this project prioritizes durability, modern aesthetics, and sustainability. High-quality, low-maintenance materials are selected for finishes across all units and communal spaces to ensure longevity and reduce upkeep. Interior finishes emphasize functionality and comfort, with sleek, contemporary designs that complement the overall aesthetic. Communal spaces feature durable materials designed to withstand high usage, with finishes that enhance sound absorption and visual appeal. Kitchen and bathroom equipment are chosen for energy efficiency and ease of use, supporting the project's sustainability goals. Additionally, furniture in shared areas is robust yet inviting, fostering a comfortable and flexible environment for occupants.

4.9 – Fire Escape Signage

The fire escape signage strategy for the project is designed to prioritize safety, visibility, and compliance with fire regulations. Clear, durable signage will be strategically positioned throughout the building to guide occupants to designated fire exits. Signs will be illuminated for visibility in low-light or emergency conditions, ensuring they remain easy to locate even in power outages. Directional signage will be placed along all escape routes, with additional signage at decision points to minimize confusion during evacuation. All signs meet local

and national safety standards, enhancing the overall safety and preparedness of the building.

5. Structural Design

5.1 – General Structural strategy overview

The structural strategy for the project focuses on stability, efficiency, and adaptability to the confined site and urban environment. A reinforced concrete frame provides the primary structural support, selected for its durability and capacity to accommodate the building's height and layout. Precast concrete elements are incorporated where possible to expedite construction and improve quality control, minimizing disruption to the surrounding area. Structural components are designed to integrate seamlessly with architectural elements, supporting open communal spaces while maintaining resilience and load-bearing capacity. The strategy ensures long-term structural integrity, accommodating high occupancy and promoting sustainability by prioritizing durable, low-maintenance materials.

5.2 - Substructure and Superstructure

The substructure of the project is designed to provide a stable and durable foundation, addressing the site's confined nature and urban surroundings. A reinforced concrete foundation system ensures load distribution and minimizes settlement, tailored to support the building's height and weight while considering soil conditions. Piling may be used to enhance stability, particularly in areas with lower soil-bearing capacity.

The superstructure utilizes a reinforced concrete frame to provide robust support and longevity, with precast elements integrated to accelerate construction and enhance quality. This approach allows for large, open-plan communal spaces without compromising structural integrity. The design emphasizes load-bearing efficiency, meeting the demands of high occupancy while aligning with the building's architectural form and sustainability goals.

5.3 - Load Considerations

The load considerations for the project address anticipated live, dead, wind, and seismic loads to ensure structural stability and occupant safety. Dead loads account for the building's permanent components, including structural elements, fixed equipment, and finishes, with careful calculations to support the concrete frame and minimize deflection over time. Live loads consider the variable occupancy patterns typical of student accommodations, incorporating factors such as communal spaces, furnishings, and fluctuating occupant loads. Wind loads are evaluated based on the building's height, location, and exposure, ensuring that lateral stability is maintained under high-wind conditions, with reinforced elements and connections as needed. Seismic loads are considered at a moderate level due to the region's relatively low seismic activity; however, the structure is designed to accommodate lateral forces and movement to maintain resilience and minimize potential damage in the event of seismic activity. This comprehensive approach to load considerations aligns with structural standards and safety regulations, ensuring long-term stability.

5.4 – Building Design Life

The building design life for this project is established to ensure durability, functionality, and minimal maintenance over an extended period, targeting a lifespan of at least 50 years.

Structural materials, including reinforced concrete and precast components, are selected for their longevity and resilience against wear, environmental factors, and urban conditions. Design considerations also account for potential future adaptations, ensuring that the structure remains flexible to accommodate evolving needs over its lifespan. Regular maintenance intervals are planned to address normal wear and optimize performance, aligning with sustainability goals by reducing the need for significant structural replacements or upgrades. This approach supports a robust and sustainable asset that will serve the community for decades.

6. Mechanical, Electrical, and Plumbing (MEP) Systems

6.1 – General Criteria

6.2 - HVAC Requirements: Outline heating, ventilation, and air conditioning needs.

6.2.1 – Fresh air intake

6.2.2 - Heat recovery and heating

6.3 - Electrical Systems: Specify power requirements, lighting standards, and emergency power provisions.

6.3.1 – Electrical Power Distribution

6.4 - Plumbing Systems: Describe water supply, wastewater management, and fixture requirements.

7. Sustainability and Environmental Considerations

7.1 – General sustainability strategy overview

The sustainability strategy for this project is focused on minimizing environmental impact, enhancing energy efficiency, and promoting long-term resilience. The design targets a near-zero energy rating, incorporating high-performance building materials and systems that reduce overall energy consumption. Smart sensors are used to monitor energy, water, and carbon usage, allowing for real-time adjustments and data collection for environmental reporting. Sustainable practices extend to waste management, with recycling facilities and eco-friendly materials used throughout the building's finishes and furniture. The landscaped courtyard and green roof spaces provide natural insulation and support biodiversity, contributing to occupant well-being. Overall, this strategy aligns with industry-leading ESG standards and aims to achieve certifications such as BREEAM, BER, and Fitwel, supporting health, well-being, and environmental responsibility across the project lifecycle.

Sustainability is fundamental to our senior living development. The Fitwel rating of 3, BER A2, and BREEAM rating of “excellent” highlight our commitment to creating a healthy living environment. From the very beginning, we committed to achieving the highest standards in ESG (Environmental, social, and governance). We collaborated closely with our ESG

consultants, DLC and ESG Europe, and incorporated lessons learned from other properties and initiatives implemented by our partners in various locations.

7.2 – Promoting Active Travel

The project is designed with a strong focus on sustainable mobility, aligning with the objectives outlined in the Mobility Management Plan Framework for Dublin, the Transport Strategy for the Greater Dublin Area (2016-2035), and the Dublin City Council Development Plan (2016-2022). The development promotes a car-free lifestyle by encouraging walking, cycling, and public transport use. Secure and ample bicycle storage facilities are incorporated to accommodate residents, reducing the need for private car usage and supporting the goals of both the Mobility Management Plan and Dublin's broader transport strategy to reduce traffic congestion and promote sustainable transport options.

The building's strategic location near key public transport links, including the Luas line and nearby bus routes, offers convenient access to essential services and education hubs, further promoting active travel. In addition, pathways and access points have been designed to improve walkability and ensure pedestrian safety throughout the complex, reinforcing the community's connection to a broader network of sustainable transport routes.

By incorporating these features, the development supports environmental objectives, reduces carbon emissions, and contributes to a healthier, more sustainable lifestyle for residents. These initiatives align with the social and environmental goals of reducing travel-related stress, enhancing public transport accessibility, and fostering safer, more walkable neighborhoods, as outlined in the Transport Strategy for the Greater Dublin Area. Furthermore, by aligning with BREEAM's transport and mobility criteria, the project ensures that the development not only meets high environmental standards but also facilitates an integrated approach to mobility that enhances quality of life for all occupants.

7.3 – Culture and History

The project design celebrates the rich culture and history of the Stoneybatter area, integrating architectural and artistic elements that reflect the heritage of the local community. Original cobblestones from the site have been carefully preserved, taken off site assumed to be treated, and repurposed within the courtyard, maintaining a tangible connection to the area's historical fabric. Local artists, most notably Carolyn Walsch and Sorcha O'Higgins, were commissioned to create murals and artwork that depict scenes and symbols representative of Dublin's vibrant history, adding character and a sense of place throughout the building. These cultural references not only enhance the aesthetic appeal but also foster a meaningful connection for residents, blending modern functionality with respect for Stoneybatter's distinctive identity and heritage.

To enrich the living experience, we will showcase artworks and murals from local artists throughout the communal areas. This will not only support the local art community but also create a vibrant atmosphere that inspires creativity and connection among residents. The aesthetics of the building are inspired by traditional Irish architecture, further integrating the rich cultural history of Dublin into the site, coinciding with Chapter 11 of the DCDP.

7.4 – Materials

Renewable energy integration is a cornerstone of our approach, with solar photovoltaic panels on rooftops generating clean electricity and solar thermal panels providing hot water, reducing reliance on traditional heating systems.

The energy-efficient building envelope features super-insulated walls using high-performance materials like sheep wool and triple-glazed windows, ensuring minimal heat loss and significantly lowering energy demand for heating and cooling. Our passive house design optimizes natural heat retention and ventilation, while low-emissivity (Low-E) glass maximizes natural light, contributing to a bright and inviting atmosphere.

Transportation and mobility considerations include cyclist-friendly infrastructure and electric vehicle charging stations, promoting active travel and reducing carbon emissions. Health and well-being features, such as low/no VOC paints and enhanced thermal comfort, ensure that our residents enjoy a safe, comfortable, and sustainable living environment. Our usage of hemp-bricks in the exterior construction, which are carbon-negative, insulating, and highly durable, further promotes the usage of sustainable materials. By weaving these practices into the fabric of our development, we create a vibrant, eco-friendly community tailored to the needs of our senior residents.

7.5 – Green Building Standards: State any certifications you're aiming for (e.g., LEED,BREEAM).

7.6 - Energy Efficiency

A centralized building management system (Utopi), motion-daylight-sensing LED lighting, and smart sensors to monitor energy, water, and carbon usage, will be used optimize energy use and significantly reduce energy consumption which aligns with chapter 9 of Dublin City Development 2022-2028. This not only lowers utility bills but also ensures that our residents enjoy well-lit, safe, and welcoming spaces. The collected real-time data will allow residents to track their consumption and make informed decisions about their resource use. Moreover, the data collected will facilitate ESG reporting, showcasing our commitment to transparency and sustainability

A centralized building management system (Utopi), motion-daylight-sensing LED lighting, and smart sensors to monitor energy, water, and carbon usage, will be used optimize energy use and significantly reduce energy consumption which aligns with chapter 9 of Dublin City Development 2022-2028. This not only lowers utility bills but also ensures that our residents enjoy well-lit, safe, and welcoming spaces.

Additionally, the use of heat recovery in the HVAC system of the building reduces the energy needed to heat the building.

The collected real-time data will allow residents to track their consumption and make informed decisions about their resource use. Moreover, the data collected will facilitate ESG reporting, showcasing our commitment to transparency and sustainability.

7.7 - Environmental Impact: Address waste management, recycling facilities, and sustainable materials.

8. Technology and Communications

8.1 - IT Infrastructure: Define requirements for networking, Wi-Fi, and data centers.

The IT infrastructure for Stoneybatter Place, a state-of-the-art Purpose-Built Student Accommodation (PBSA), should be designed to support high-quality living spaces with robust and reliable technology. The networking requirements include a high-speed, fiber-optic backbone to ensure fast and stable internet connectivity throughout the facility. Wi-Fi coverage must be comprehensive, providing seamless access in all areas, including common spaces, individual rooms, and outdoor areas, with sufficient bandwidth to support multiple devices per student. Data centers should be equipped with advanced security measures, including firewalls, intrusion detection systems, and regular backups to protect sensitive information. Additionally, the infrastructure should support smart building technologies, such as automated lighting, climate control, and security systems, to enhance the living experience and operational efficiency. The overall goal is to create a technologically advanced environment that meets the needs of contemporary students while ensuring reliability, security, and scalability.

8.2 - Telecommunications: Specify needs for telephone systems, intercoms, and other communication technologies.

The telephone system should include VoIP (Voice over Internet Protocol) technology to provide reliable and cost-effective communication within the facility and with external contacts. Each room and common area should be equipped with telephones that offer direct dialing, voicemail, and emergency call features.

Intercom systems are essential for efficient communication between different parts of the building. These should be strategically placed in common areas, entry points, and key locations to facilitate announcements, security alerts, and general communication. The intercom system should be integrated with the building's security system to allow for controlled access and monitoring.

Other communication technologies should include a robust public address system for important announcements and emergency notifications. Additionally, digital signage can be used in common areas to provide real-time information, event updates, and important notices. The overall goal is to ensure that all communication technologies are seamlessly integrated, user-friendly, and support the safety, security, and convenience of the residents.

9. Security and Safety

9.1 – General security strategy overview

The security strategy for the student living facility focuses on ensuring resident safety through integrated surveillance, controlled access, and 24/7 monitoring. It employs layered protection with adaptable measures that maintain security without compromising comfort.

9.2 – Specialized security strategy

9.2.1 – Parking

The parking area will be secured with surveillance cameras, emergency call stations, and bright lighting. Resident and staff parking will have gated access controlled by keycards or license plate recognition, while visitor parking will be monitored and time restricted. Regular security patrols will ensure ongoing safety.

9.2.2 – Building and Rooms

Building access will be controlled via keycard or biometric systems at all entry points. High-security areas, such as medication storage and administrative offices, will have dual authentication. Security cameras will monitor common areas, and resident rooms will have secure locks and emergency alert systems for direct staff communication.

9.3 - Life Safety Systems: Outline fire protection systems, alarms, and evacuation plans.

The life safety systems at Stoneybatter Place are designed to ensure resident safety through advanced fire protection measures. This includes state-of-the-art fire detection and suppression systems, with smoke detectors and heat sensors placed throughout the building. These systems are connected to a central fire alarm that alerts residents and emergency services. Fire alarms, both audible and visual, are installed in all areas to accommodate everyone, including those with hearing impairments. Clear evacuation plans are displayed in common areas and rooms, detailing escape routes and assembly points. Regular fire drills are conducted to ensure residents are familiar with procedures, ensuring a safe and secure living environment.

9.3.1 – Egress Strategy

The egress strategy for Stoneybatter Place is designed to ensure safe and efficient evacuation in case of an emergency. The building features multiple clearly marked exits on each floor, providing direct and unobstructed paths to the outside. These exits are strategically located to ensure that all residents can reach an exit quickly, regardless of their location within the building.

Emergency lighting is installed along all egress routes to provide visibility during power outages or low-visibility conditions. Exit signs are illuminated and placed at regular intervals to guide residents to the nearest exit. Stairwells are designed to be wide and free of obstructions, allowing for smooth and rapid evacuation.

Each floor has designated assembly points where residents can gather safely after evacuating the building. These assembly points are clearly marked and located at a safe distance from the building to ensure the safety of all occupants.

Regular drills and training sessions are conducted to familiarize residents with the egress routes and procedures, ensuring they are prepared to evacuate quickly and safely in an emergency. The overall goal of the egress strategy is to provide a clear, efficient, and safe evacuation process for all residents of Stoneybatter Place.

9.3.2 – Sprinklers

The sprinkler system at Stoneybatter Place is a critical component of the building's fire protection strategy. Designed to provide rapid response to fire incidents, the

system includes automatic sprinklers installed throughout the building, including all common areas, corridors, and individual rooms. These sprinklers are connected to a reliable water supply and are activated by heat, ensuring that fires are quickly suppressed before they can spread. The system is designed to meet all relevant safety codes and standards, providing comprehensive coverage and enhancing the overall safety of the building. Regular maintenance and inspections are conducted to ensure the system remains fully operational and effective in protecting residents and property.

9.3.3 – Fire Alarm System

The fire alarm system at Stoneybatter Place is designed to provide comprehensive and reliable fire detection and alerting capabilities. The system includes smoke detectors, heat sensors, and manual pull stations strategically placed throughout the building to ensure early detection of fire incidents. These devices are interconnected and linked to a central fire alarm control panel, which monitors all sensors and triggers alarms when necessary.

The fire alarms are both audible and visual, ensuring that all residents, including those with hearing impairments, are promptly alerted in case of an emergency. The system is designed to automatically notify emergency services upon activation, ensuring a swift response.

Regular maintenance and testing of the fire alarm system are conducted to ensure its reliability and effectiveness. The system complies with all relevant safety codes and standards, providing a high level of protection for the residents of Stoneybatter Place. The overall goal is to ensure the safety and security of all occupants through a robust and efficient fire alarm system.

10. Accessibility

10.1 - Regulatory Compliance

The regulatory compliance section for Stoneybatter Place ensures that all designs meet ADA standards and local accessibility regulations. This includes providing barrier-free access to all areas of the building, with features such as ramps, wide doorways, and accessible restrooms. Elevators are equipped with Braille signage and audible floor indicators to assist visually impaired residents. Common areas and individual rooms are designed to accommodate wheelchair users, with appropriate turning spaces and accessible fixtures. The project also includes tactile warning surfaces and clear signage to aid navigation for all residents. Regular audits and inspections are conducted to ensure ongoing compliance with accessibility standards, creating an inclusive and welcoming environment for all students.

10.2 - Universal Design Principles

The universal design principles for Stoneybatter Place aim to create an inclusive environment that enhances accessibility for all users. This involves incorporating features that cater to a wide range of abilities and needs. Key elements include step-free access to all areas, ensuring that entrances, pathways, and common spaces are easily navigable for

individuals with mobility impairments. Interior spaces are designed with wide doorways and hallways to accommodate wheelchairs and other mobility aids.

Fixtures and controls, such as light switches, thermostats, and door handles, are placed at accessible heights and are easy to operate. Signage throughout the building includes large, high-contrast text and Braille to assist those with visual impairments. Additionally, auditory signals and visual alarms are used to ensure that all residents are aware of important notifications and emergencies.

Common areas and amenities are designed to be inclusive, with seating options that cater to different needs and accessible kitchen and laundry facilities. The overall goal is to create a living environment that is not only compliant with accessibility standards but also welcoming and functional for all residents, promoting independence and comfort.