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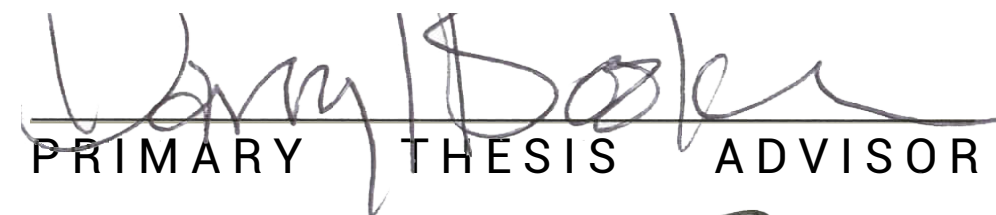
SAMANTHA BAIERL

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DEPARTMENT OF ARCHITECTURE AND  
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B Y S A M A N T H A J B A I E R L

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# ABSTRACT:

THIS THESIS EXPLORES HOW THE PHYSICAL ENVIRONMENT, THROUGH SPACES AND THEIR CONNECTIONS, CAN POSITIVELY IMPACT THE OVERALL WELLNESS AND PRODUCTIVITY OF SENIOR CITIZENS. THIS THESIS AIMS TO PROVE THE LEVEL OF ENGAGEMENT THAT SENIORS PARTICIPATE IN CAN BE AFFECTED BY THE COMMUNITY AND ACCESSIBILITY LEVELS THEY ARE PROVIDED WITH AND THIS IN TURN CAN IN TURN AFFECT THEIR QUALITY OF LIVE. THE TYPOLOGY OF THIS THESIS IS A SENIOR LIVING FACILITY THAT ALSO PROVIDES SPACES THAT ARE OPEN TO THE COMMUNITY FOR ACTIVITIES, PROGRAMS, AND CLASSES AS WELL. THE SITE IS LOCATED IN THE ISSAQUAH HIGHLANDS ON THE WESTERN SIDE OF RAINY AND MOUNTAINOUS WASHINGTON STATE. THE SITE IS ON THE OUTSKIRTS OF TOWN, ASSIGNED TO THE FUTURE DEVELOPMENT AREA, BUT IS CONVENIENTLY LOCATED NEAR EVERYDAY AMENITIES LIKE GROCERY STORES, BANKS, HEALTH CLUBS, AND THE HOSPITAL. ISSAQUAH HIGHLANDS HAS THE INFRASTRUCTURE TO SUPPORT THIS THESIS WHILE THE THESIS ITSELF WILL ADD AN ELEMENT THE TOWN IS IN NEED OF. THIS SITE ITSELF IS FAIRLY VACANT WITH LOW GROW SHRUBBERY AND A FEW TREES THEREFORE NO EXISTING STRUCTURES WILL BE DISTURBED OR TAKEN AWAY. WITH MOUNTAINS, EVERGREENS, AND LAKE SAMMAMAISH AS THE VISTAS THE SITE IS SURROUNDED BY NATURE WHILE HAVING THE CONVENIENCE BEING RIGHT

IN A TOWN THAT WAS NEWLY DESIGNED FOR WALK-ABILITY. THE JUSTIFICATION FOR THIS THESIS IS DRIVEN BY THE FACT THAT THERE IS A HUGE DEMAND FOR SENIOR HOUSING WITH THE BABY BOOMER POPULATION QUICKLY RISING AND REACHING THE AGES WHERE ALTERNATIVE HOUSING OPTIONS ARE NECESSARY. LIKEWISE, THE IDEA OF SENIOR HOUSING AFFECTS EVERYONE WHETHER IT BE A RELATIVE OR FAMILY FRIEND, ONE DAY MOST WILL BE FACED WITH THE DECISION TO MOVE TO A FACILITY THAT CAN PROVIDE ADEQUATE CARE. THEREFORE THE CONCEPT OF SENIOR LIV-ING HAS ROOM FOR IMPROVE IMENT THAT CAN BEENHANCED BY THE CONCEPT OF THESIS DESIGN THROUGH ACCESSIBILITY,

COMMUNITY ENGAGEMENT, AND GREEN ELEMENTS. THIS THESIS WILL CATER TO THE SENIORS 65 AND OLDER OF THE ISSAQUAH AREA THAT ARE IN NEED OF AN ALTERNATIVE HOUSING OPTION, OR ASSISTED CARE BECAUSE THEIR CURRENT LIVING SITUATION IS INADEQUATE FOR SOME REASON OR ANOTHER. ALONG WITH THE RESIDENTS COMES THEIR FAMILIES AND FRIENDS THAT VISIT AND EXPERIENCE THE DESIGN ALONG WITH SUPPORTING PROGRAMS OF THE COMMUNITY THAT PARTICIPATE AND ENGAGE WITH THE SPACES PROVIDED THAT ARE SUPPORTED BY THIS THE SIS DESIGN. THE RESEARCH ON THIS THESIS'S TYPOLOGY, CONTEXT, SUSTAINABLE STRATEGIES, AND THE AGING COMMUNITY

WILL BE ONGOING THROUGHOUT THE PROJECTS DEVELOPMENT TO PROVIDE FURTHER INSIGHT AND UNDERSTANDING AND APPLY IT TO THE DESIGN. THIS THESIS WILL BE CONTINUOUSLY DOCUMENTED UNTIL FINAL COMPLETION BY MEANS OF SKETCHES, WRITINGS, COMPUTER MODELS, PHYSICAL MODELS, ETC. THE END PRODUCT WILL BE A COLLECTION OF THE MOST IMPORTANT INFORMATION PRESENTED GRAPHICALLY UPON BOARDS ALONG WITH A PHYSICAL CONTEXT MODEL WITH THE BUILDING MODEL AS A FINAL DISPLAY ALONG WITH A COMPLETED VERSION OF THIS BOOK IN DIGITAL FORMAT. A DIGITAL COPY OF THE FINAL THESIS PROJECT WILL THEN BE MADE AVAILABLE TO THE

UNIVERSITY AS A RECORD OF COMPLETION AND FOR VIEWING BY STAFF AND STUDENTS.

# NARRATIVE:

## THESIS THESIS STATEMENT

BECAUSE THE CURRENT CONCEPT OF SENIOR LIVING PROVIDES FOR BASIC HUMAN NEEDS THEY CAN LACK CONNECTIVITY IN CERTAIN ASPECTS INCLUDING ELEMENTS LIKE PROGRAMMING WITHIN THE COMMUNITY AND EXPOSURE AND ENGAGEMENT TO NATURE WHILE MANY TIMES THIS CAN LEAD TO A DECLINE IN HEALTH BOTH PHYSICALLY AND MENTALLY. IN CREATING A SENIOR LIVING FACILITY THAT CONSIDERS A HOLISTIC APPROACH INTO NOT ONLY DAILY LIVES OF SENIORS BUT CONSIDERS THEIR MENTAL AND PHYSICAL STATE BY FOCUSING ON ACCESSIBILITY, COMMUNITY, AND NATURE THIS CAN PROVIDE OPPORTUNITY THAT CURRENT SENIOR LIVING FACILITIES LACK.

## JUSTIFICATION

THE IMPORTANCE HOLDS IN THE FACT THAT EVERYONE AGES AND MOST WOULD AGREE THAT THE LIFESTYLE CHOICES AND HABITS THROUGHOUT ONES LIFE, EXPECIALLY DURING ONES SENIOR YEARS, CAN GREATLY HOLD A CORRELATION TO THE PRODUCTIVITY LEVEL AND QUALITY OF LIFE. AT SOME POINT MOST SENIORS HAVE TO DEAL WITH THE FACT THAT THEIR CURRENT LIVING SITUATION IS UNMANAGEABLE FOR SOME REASON OR ANOTHER WHETHER IT BE TOO LARGE TO MAINTAIN OR IT IS NOT HANDICAP ACCESSIBLE. THEREFORE, NOW MORE THAN EVER WITH THE BABY BOOMERS REACHING SENIOR AGES THE DEMAND FOR SENIOR HOUSING OPTIONS ARE IMPORTANT. OVER THE YEARS THE SENIOR HOUSING OPTIONS HAVE BEEN REDEFINED FOR THE BETTER BUT THERE IS STILL ROOM FOR IMPROVEMENT IN THE WAY THAT SENIOR HOUSING CAN BE DEFINED.

## PROJECT EMPHASIS

THIS THESIS EMPHASIZES HOW CONNECTING PHYSICAL SPACES CAN CREATE A PRODUCTIVE, SAFE, AND ENGAGING ENVIRONMENT FOR SENIORS. ELEMENTS INCLUDING ACCESSIBILITY, COMMUNITY, AND NATURE WILL BE USED TO FURTHER EXPLORE HOW THIS THESIS CAN PROVIDE AND ACCOMMODATE FOR THE DESIRED OUTCOME OF A HEALTHY AND INSPIRING SENIOR LIVING FACILITY THAT PROMOTES OVERALL WELLNESS TO ITS RESIDENTS, STAFF, VISITORS, AND COMMUNITY.

## TYPOLGY

THIS THESIS BUILDING PROVIDES RESIDENTS FOR INDEPENDENT SENIORS AND SENIORS THAT NEED MINIMAL ASSISTANCE. ALONG WITH RESIDENTIAL PART OF THE BUILDING THERE ARE MULTIPLE SPACES, AMENITIES, THAT OFFER CONVENIENCES LIKE A WELLNESS CENTER, A REC ROOM, A KITCHEN, GARDENS, AND MORE. ALL THE SPACES THAT ARE NOT STRICTLY FOR LIVING ARE FOR THE RESIDENTS FIRSTLY BUT ARE OPENED TO THE COMMUNITY FOR PROGRAMS.



# GOALS:

FOR ANY TYPE OF PROJECT IT IS ONLY PROPER TO SET SPECIFIC GOALS FOR ONESELF. THEREFORE, THROUGHOUT THIS DESIGN THESIS CERTAIN GOALS ARE SET TO PROVIDE GUIDANCE INTO THE DESIRED OUTCOME IN REGARDS TO THE ACADEMIC, PERSONAL, AND PROFESSIONAL CATEGORIES.

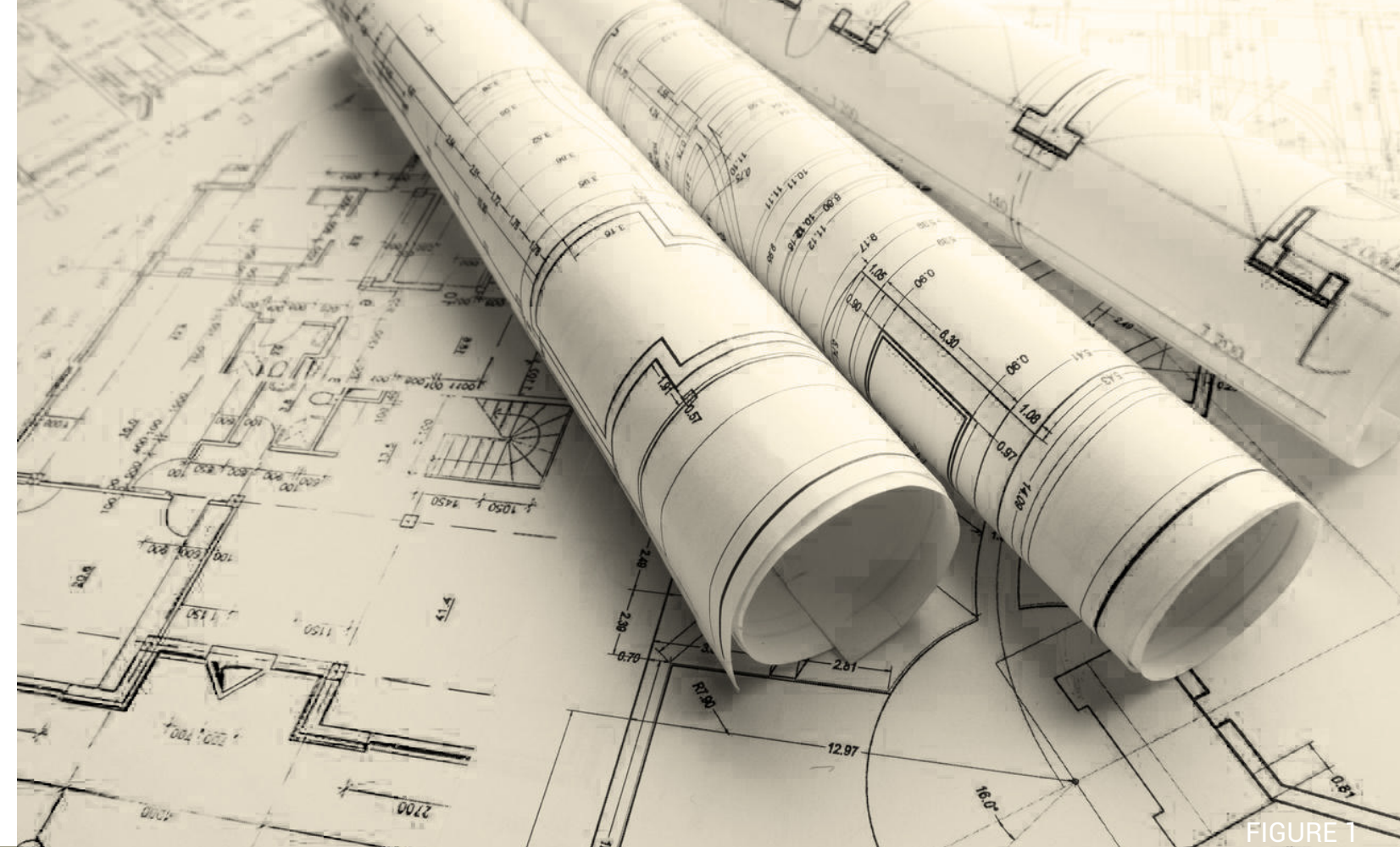


FIGURE 1

## THE PROFESSIONAL

THE OVERALL PROCESS OF THIS THESIS WILL OFFER PREPARATION FOR THE PROFESSIONAL WORLD. LOOKING INTO ALL OF THE ASPECTS FROM THE FIRST CONCEPT THROUGH DESIGN DEVELOPMENT UNTIL THE COMPLETE PRESENTATION THIS ALLOWS FOR A REALISTIC DEDICATION TO EACH SINGLE TASK GIVEN IN A PROFESSIONAL POSITION. IT PROVIDES AN UNDERSTANDING THAT EACH ASPECT OF THE PROCESS IS IMPORTANT, AS A NEW INTERN MOST DAILY TASKS ASSIGNED WILL NOT INCLUDE DESIGNING BUT RATHER WORKING ON CONSTRUCTION DRAWINGS. THEREFORE, AN APPRECIATION OF THE IMPORTANCE OF EACH PIECE OF THE PROCESS WILL HOPEFULLY BE GAINED THROUGHOUT THIS THESIS PROJECT WHICH CAN BE CARRIED INTO THE PROFESSIONAL CAREER. LIKewise HAVING A THESIS PROFESSOR GUIDE ME THROUGH A NEW PROCESS IS MUCH LIKE BEING ASSIGNED AND TAUGHT BY A PRINCIPLE IN THE PROFESSIONAL WORLD. ACCEPTING GUIDANCE AND LEARNING UNDER OTHERS WILL ALWAYS PROVIDE INSIGHT INTO ANOTHER UNDERSTANDING OF THIS PROFESSION, ESPECIALLY WHEN IT IS COMING FROM A SUPERIOR. IT IS NOT JUST THE END PRODUCT THAT SPEAKS TO A PROPERLY DESIGNED PROJECT BUT THE PROCESS AS WELL.

## THE ACADEMIC

OVER THE LAST FOUR YEARS I HAVE STUDIED AND DESIGNED IN THE ACADEMIC UNDERSTANDING OF ARCHITECTURE. IN THE END THIS THESIS SHOULD DEMONSTRATE THE SKILLS I HAVE ACQUIRED WITH GREATER KNOWLEDGE AND APPRECIATION FOR THE MAJOR TOPICS PRESENTED. THROUGHOUT THE THESIS PROCESS OF THERE IS NO DOUBTED THAT NEW DISCOVERIES WILL BE MADE. THE FINAL PRESENTATION WILL DISPLAY THE SKILLS ACQUIRED THROUGHOUT THE YEAR THROUGH GRAPHICAL AND PHYSICAL, AND ELECTRONIC PRESENTATION.

## THE PERSONAL

TO GROW AS AN ARCHITECTURAL DESIGNER LEARNING IS NEVER DONE AND IT IS THIS FACT THAT DRIVES ME TO FURTHER MY UNDERSTANDING IN NOT ONLY THE ARCHITECTURAL FIELD BUT OTHER FIELDS AS WELL. THIS THESIS PROCESS WILL EXPAND MY UNDERSTANDING OF RAINY AND MILD CLIMATES SUSTAINABLE STRATEGIES, THE PSYCHOLOGY OF SPACES, THE IMPACT OF COMMUNITY LIVING AMONG SENIOR CITIZENS, AND THE APPLICATION OF GREEN ELEMENTS ETC. I HOPE TO GAIN A DEEPER UNDERSTANDING INTO THE SUBJECT MATTER TO DEEPEN MY KNOWLEDGE BASE.





FIGURE 2

# USER:

THE SENIOR LIVING FACILITY IN THE ISSAQUAH HIGHLANDS IS DESIGNED WITH FOUR GROUPS OF INDIVIDUALS: THE RESIDENT, THE WORKER, THE VISITOR, AND COMMUNITY ORGANIZATIONS.



FIGURE 3



FIGURE 4

## T H E R E S I D E N T

IN THIS SENIOR LIVING FACILITY THE MAIN USERS WILL BE THE PEOPLE AGES 65+ OF THE ISSAQUAH AREA. THE RESIDENTS WILL LIVE IN THE FACILITY THEY ARE PEOPLE THAT WOULD LIKE A CHANGE FROM THEIR CURRENT LIVING SITUATION. THEY ARE WELCOMED INTO THIS LIVING FACILITY FOR A NUMBER OF REASONS INCLUDING A NEED TO DOWNSIZE OR A NEED FOR A MORE ACCESSIBLE HOME OR SIMPLY WOULD LIKE TO BE IMMERSSED IN A COMMUNITY OF PEOPLE OF THE SAME AGES.

## T H E W O R K E R

THE PEOPLE WHO WORK IN THIS SENIOR LIVING FACILITY INCLUDE NURSES, COOKS, WELLNESS COACHES, MANAGERS, AND CLEANING CREW WOULD BE USERS OF THIS FACILITY. IT WOULD NOT RUN PROPERLY WITHOUT THEM AND THEIR ATTENDANCE WOULD BE DAILY. THE WORKERS WILL PROVIDE ESSENTIAL CARE TO THE RESIDENTS FROM THINGS LIKE HOSPITALITY TO PERSONAL CARE TO MAINTENANCE.

## T H E T H E V I S I T O R C O M M U N I T Y

THE FAMILIES AND FRIEND OF THE RESIDENTS ARE WELCOMED AND STRONGLY ENCOURAGED INTO THE FACILITY THEREFORE WILL BE ANOTHER TYPE OF USER THAT WILL CONTINUOUSLY BE AROUND. THESE VISITORS WILL HAVE FULL ACCESS TO THE FACILITY AND ARE ALLOWED NIGHT PASSES IF THEY WISH TO STAY THE NIGHT. THEY MUST SIMPLY BE APPROVED AT THE FRONT DESK FOR SAFETY PRECAUTIONS.

ALTHOUGH THIS IS A SENIOR LIVING FACILITY IT IS OPENED UP TO THE COMMUNITY AND INVITES ORGANIZATIONS AND PROGRAMS IN. THEREFORE, PROGRAMS LIKE GIRL SCOUTS, COOKING CLASSES, AND WELLNESS CLASSES ARE SUPPORTED AND ENCOURAGED TO FACILITATE THE NON-RESIDENTIAL SPACES. WITH MULTIPLE PROGRAMS SUPPORTED IT OPENS UP THE FACILITY TO THE WHOLE COMMUNITY.

# RESEARCH:

INDEPENDENT / ASSISTED SENIOR LIVING

IMPAIRMENTS, BOTH PHYSICAL AND MENTAL, CAN OCCUR WHEN THE ELDERLY AGING PROCESS BEGINS; THE LOSS OF ABILITIES SUCH AS BALANCE, AGILITY, AND MEMORY CAN CREATE HARDSHIPS IN SIMPLE DAILY TASKS AND ACTIVITIES PERFORMED. THESE LOSSES CAN AFFECT AND/OR INHIBIT OVERALL WELLNESS IN REGARDS TO THE LONGEVITY OF A PRODUCTIVE, INDEPENDENT, AND SOCIAL LIFESTYLE. ELIMINATING BARRIERS THAT WOULD CAUSE EXTRA STRESS TO THE PHYSICAL OR MENTAL STATE OF A SENIOR ARE CRUCIAL, FOR THEY MAY LEAD TO OTHER AREAS OF LIFE AND HAVE A NEGATIVE DOMINO EFFECT. THEREFORE, THE ENVIRONMENT BOTH PHYSICAL AND SOCIAL, IN WHICH SENIOR CITIZENS DWELL, CAN BE MADE A POSITIVE KEY CONTRIBUTOR OF A HEALTHY AND DYNAMIC AGING PROCESS. SENIOR LIVING FACILITIES ARE, FOR THE MOST PART, ADEQUATE IN THE FACT THEY ARE ABLE TO PROVIDE ALL EFFECTS NECESSARY TO LIVE A STANDARD LIFE. WHAT THEY ARE LACKING ARE OPPORTUNITIES TO CATER TO CONTINUED OVERALL WELLNESS. THIS PROBLEM CAN BE SOLVED BY CONSIDERING A HOLISTIC DESIGN APPROACH; AN APPROACH THAT CONSIDERS MULTIPLE ASPECTS AND DOES NOT JUST DESIGN FOR ONE DESIRED OUTCOME BUT MANY. APPLYING THE CONCEPT OF CONNECTIVITY TO DESIGN INTENTIONS OF SENIOR LIVING FACILITIES CAN BE THE ADVANCEMENT NEEDED TO SUPPORT

CURRENT AND CONTINUED WELLNESS OF ITS RESIDENTS. THIS CAN BE ACHIEVED BY FOCUSING ON PHYSICAL MOBILITY WITHIN AND AROUND THE HOME, CREATING A SENSE OF COMMUNITY THROUGHOUT THE FACILITY AND THE SURROUNDING TOWN, AND INTEGRATING NATURE BY CREATING OPPORTUNITIES FOR INTERACTION THROUGH MULTIPLE SENSES. THESE ARE ELEMENTS OF DESIGN THAT ARE NEEDED TO BE WORKING HARMONIOUSLY TOGETHER TO TRANSFORM SENIOR LIVING FACILITIES FROM WHAT THEY ARE TODAY TO SUCCESSFUL AND SUPPORTIVE ENVIRONMENTS THAT CATER TO AND NURTURE CONTINUED WELLNESS FOR SENIOR LIVING.

IT IS IMPORTANT, WITH DESIGNING FOR SENIORS, TO CONSIDER MOBILITY CHANGE OVER TIME AND ALLOWING THESE CONSIDERATIONS TO DOMINATE THE ACCESSIBILITY ASPECT OF DESIGN. IT IS STATED IN THE ARTICLE MAKING A HOUSE A HOME THAT UNIVERSAL DESIGN IS, "DESIGN OF PRODUCTS AND ENVIRONMENTS TO BE USABLE BY ALL PEOPLE, TO THE GREATEST EXTENT POSSIBLE, WITHOUT THE NEED FOR ADAPTATION OR SPECIALIZED DESIGN" (TEPPER, 2016). TEPPER CONTINUES ON TO EMPHASIZE THAT, "A KEY CONCEPT OF UNIVERSAL DESIGN IS TO PROVIDE ACCESSIBILITY WITHOUT STIGMATIZATION BY INTEGRATING ACCESSIBILITY FEATURES

SUCH THAT THEY BENEFIT ALL USERS WHILE GOING ESSENTIALLY UNNOTICED." IN RESIDENTIAL SETTINGS, FEATURES CAN INCLUDE LEVER-HANDLE FAUCETS, NO-THRESHOLD WALK-IN SHOWERS, ZERO-STEP ENTRANCES, WIDER DOORWAYS AND HALLS, AND KITCHEN COUNTER TOPS AT VARYING LEVELS TO ACCOMMODATE STANDING AND SEATED USERS, AS WELL AS PEOPLE OF DIFFERENT HEIGHTS" (TEPPER, 2016). THIS SIMPLY SUGGESTS THAT DESIGNING FOR THE NEEDS OF ALL PEOPLE NO MATTER WHAT THEIR PHYSICAL CAPABILITIES ARE PRUDENT. THIS NEEDS TO BE THE CONCEPT WHEN DESIGNING FOR ANYONE BUT ESPECIALLY WHEN DESIGNING FOR SENIORS. EVEN IF A RESIDENT HAS

FULL PHYSICAL CAPABILITIES THAT DOES NOT MEAN THAT THEIR STATUS COULD CHANGE IN THE FUTURE. THEREFORE, IF THE STATUS OF MOBILITY WERE TO CHANGE, AT ANY POINT, THE ABILITY OF DAILY HOUSEHOLD TASKS WOULD NOT BE INHIBITED IF UNIVERSAL DESIGN CONCEPTS ARE IMPLEMENTED IN AND AROUND THE HOME.



CERTAIN HOUSEHOLD TASKS CAN BE DIFFICULT TO PERFORM FOR SENIORS, THEREFORE IDENTIFYING THE MAIN TASKS THAT CAN LEAD TO COMPLICATIONS IS IMPORTANT. IT IS OBSERVED BY MARIANNE GRANBOM IN A RESEARCH STUDY, A PUBLIC HEALTH PERSPECTIVE TO ENVIRONMENTAL BARRIERS AND ACCESSIBILITY PROBLEMS FOR SENIOR CITIZENS LIVING IN ORDINARY HOUSING, THAT FOR PEOPLE AGES 80-89, "THREE BARRIERS WERE AMONG TOP-TEN BARRIERS REGARDLESS OF HOUSING TYPE OR FUNCTIONAL PROFILE; STEPS/THRESHOLD/ DIFFERENCES IN LEVEL BETWEEN ROOMS; WALL-MOUNTED CUPBOARDS AND SHELVES PLACED TOO HIGH IN KITCHEN AND NO GRAB BARS AT SHOWER/BATH AND TOILET" (GRANBOM, IWARSSON, KYLBERG, PETTERSSON, & SLAUG, 2016) THESE ARE JUST A FEW BARRIERS, AMONG MANY, THAT NEED TO BE CONSIDERED WHEN DESIGNING AN ACCESSIBLE LIVING FACILITY FOR SENIORS. ELIMINATING AS MANY OBSTACLES AS POSSIBLE WILL MAKE DAILY ROUTINES MORE MANAGEABLE FOR SENIORS.

ELIMINATING OBSTACLES WITHIN THE HOME ALLOWS FOR THE OPPORTUNITY OF PERFORMING TASKS WITH EASE, THEREFORE ALLOWING FOR LESS DISTURBANCES THROUGHOUT THE RESIDENTS DAY AND A GREATER OPPORTUNITY TO GO ON WITH THEIR DAY AS PLANNED. THERE IS RESEARCH THAT PROVES ACCESSIBLE AND PROPERLY DESIGNED HOMES CAN CONTRIBUTE TO INDEPENDENCE WHICH CAN IN TURN LEAD TO POSITIVE HEALTH AND WELLNESS (GRANBOM ET AL., 2016). THIS SUPPORTS THE CLAIM THAT ACCESSIBLE DESIGN DOES NOT ONLY AFFECT THE CURRENT TASK PERFORMED BY AN INDIVIDUAL BUT CAN HAVE A DOMINO EFFECT INTO OTHER ASPECTS IN LIFE. WHEN CERTAIN TASKS ARE ABLE TO BE PERFORMED WITH EASE IT ALLOWS FOR OPPORTUNITY TO CONTINUE ON TO OTHER TASKS AND ACTIVITIES PLANNED FOR THE DAY.

ACCESSIBILITY IS ONE OF THE KEY ELEMENTS OF A PRODUCTIVE SENIOR. GRANBOM EMPHASIZES THAT, "IT SHOULD BE KEPT IN MIND THAT ACCESSIBILITY IS ONLY ONE OUT OF SEVERAL ASPECTS OF HOUSING SHOWN TO BE ASSOCIATED WITH WELL-BEING AND QUALITY OF LIFE. NEIGHBORHOOD CHARACTERISTICS AND PERCEIVED ASPECTS OF HOME AND ARE AT LEAST AS IMPORTANT FOR THE INDIVIDUAL FACING DISABILITY OR AGE-RELATED FUNCTIONAL DECLINE [44, 45]." (GRANBOM ET AL., 2016). THIS RAISES THE NOTION THAT ACCESSIBILITY IS ONE OF THE MANY KEY INFLUENCES IN THE WELLNESS OF SENIORS BUT SO IS A SENSE OF BELONGING. MANY FACTORS CONTRIBUTE TO THE WELL-BEING OF SENIORS WITHIN AND AROUND THEIR HOME THAT INCLUDE BUT ARE NOT LIMITED TO ACCESSIBLE DESIGN.

THERE IS A TRANSITION IN BEHAVIOR BETWEEN ADULTS IN THE WORK FORCE AND SENIORS AFTER RETIREMENT. ADULTS IN THE WORK FORCE ARE UNLIKE OLDER ADULTS IN THE SENSE THAT THEY HAVE MORE FREE TIME, WHICH TENDS TO BE SPENT IN AND AROUND THE HOME AND NEIGHBORHOOD, ENGAGING AND PARTICIPATING WITH THOSE AROUND THEM. (LEVASSEUR ET AL., 2015) SENIORS ARE NOT FORCED TO ENGAGE WITH OTHERS AS THEY FORMERLY WOULD HAVE BEEN DURING A TYPICAL WORK DAY, AND THIS CHANGE CAN BE A NEGATIVE ONE. THIS CAN LEAD TO SECLUSION, ISOLATION, AND LONELINESS. THEREFORE, CREATING SPACES FOR COMMUNAL ACTIVITIES AND OPPORTUNITIES FOR SOCIAL INTERACTION ARE CRUCIAL. SENIORS HAVE A DIFFERENT TYPE OF CONTACT WITH THOSE AROUND THEM WHEN COMPARED TO THOSE STILL IN THE WORK FORCE, THUS THERE NEEDS TO HAVE ALTERNATIVE MEANS OF SOCIALIZING.

SOCIAL INTERACTION IS A HEALTHY WAY TO STAY ENGAGED AS IS PHYSICAL ACTIVITY, THE IMPORTANCE OF CONTINUED PHYSICAL ACTIVITY THROUGHOUT A LIFETIME REPS BENEFITS ESPECIALLY IN SENIORS. IN THE ARTICLE THE RELATIONSHIP BETWEEN THE BUILT ENVIRONMENT AND HABITUAL LEVELS OF PHYSICAL ACTIVITY IN SOUTH AFRICAN

OLDER ADULTS: A PILOT STUDY, KOLBE-ALEXANDER CLAIMS, "THERE IS CONSISTENT EVIDENCE OF ASSOCIATION BETWEEN PHYSICAL ACTIVITY AND REDUCED RISK FOR NON-COMMUNICABLE DISEASES [4]." (KOLBE-ALEXANDER, PACHECO, TOMAZ, KARPUL, & LAMBERT, 2015). WHILE CONTINUING ON TO SUGGEST THAT CONSISTENT PHYSICAL ACTIVITY IN SENIORS HAS SHOWN TOO SIGNIFICANTLY, "INCREASE FUNCTIONAL INDEPENDENCE [7], INCREASE MOBILITY AND MUSCLE STRENGTH [7, 8], MAINTAIN GLUCOSE BLOOD LEVELS [9], IMPROVE BONE HEALTH AND BONE MINERAL DENSITY [7, 9], IMPROVE PSYCHOLOGICAL [9] WELLBEING AS WELL OVERALL QUALITY OF LIFE [7, 10]" (KOLBE-ALEXANDER ET AL., 2015). THIS PROVIDES THE IMPORTANCE THAT SENIORS, SPECIFICALLY, SHOULD ENGAGE IN PHYSICAL ACTIVITY NOT ONLY FOR THEIR CURRENT HEALTH CONDITIONS BUT FOR THEIR OVERALL WELLBEING.

LOCATION CAN BE A KEY ASPECT OF DESIGN WHEN CONSIDERING KEEPING SENIORS CONNECTED TO THEIR SURROUNDINGS. THIS IS FOUND IN LEVASSEURS STUDY, LIVING WITHIN A REASONABLE PROXIMITY TO SERVICES LIKE SHOPPING, HEALTH, AND BANKING CAN LEAD TO CONTINUED INDEPENDENCE AND SOCIAL LINKS WITHIN THE COMMUNITY. (LEVASSEUR ET AL.,



FIGURE 5

2015) FOR EXAMPLE, IF THE GROCERY STORE IS ONLY A FEW BLOCKS AWAY SENIORS ARE MORE APT TO GO INDEPENDENTLY AND DO THEIR OWN SHOPPING. THIS ALSO PROVIDES A CHANCE FOR PHYSICAL ACTIVITY, LIKE BIKING OR WALKING, WITHOUT THE WORRY OF OVERDOING IT. LIVING WITHIN CLOSE PROXIMITY TO SERVICES CAN PROVIDE GREATER OPPORTUNITIES FOR CONTINUED INDEPENDENCE WHILE ALSO ALLOWING FOR OPPORTUNITY OF MORE PHYSICAL ACTIVITY.

NOT ONLY DOES CLOSENESS TO BUSINESSES HELP SENIORS MAINTAIN THEIR INDEPENDENCE AND PROVIDE THEM THE OPPORTUNITY FOR PHYSICAL ACTIVITY, BUT IT ALLOWS THEM TO SUPPORT LOCAL BUSINESSES AND MAINTAIN SOCIAL LINKS.



THE IMPORTANCE OF SAFETY IS AN ELEMENT OF COMFORT THAT CANNOT BE UNDERESTIMATED WHEN IT COMES TO SENIORS AND THEIR MOBILITY WITHIN THEIR COMMUNITY. IF THEY DO NOT FEEL COMFORTABLE THEY WILL BE LESS WILLING TO LEAVE THE SECURITY OF THEIR HOME AND ENGAGE AND PARTICIPATE. LEVASSEUR CLAIMS THAT NEIGHBORHOOD SECURITY AND USER-FRIENDLINESS CAN HELP PROMOTE COMMUNITY-DRIVEN ACTIVE LIVING IN OLDER ADULTS (LEVASSEUR ET AL., 2015). THE "USER-FRIENDLINESS" PLAYS A SIGNIFICANT ROLE IN PARTICIPATION WITHIN THE COMMUNITY. THERE ARE MANY THINGS THAT SENIORS STRUGGLE WITH THEREFORE, THE EASIER IT IS TO MANEUVER ABOUT THE TOWN THE HIGHER CHANCE THEY WILL PARTICIPATE IN THE COMMUNITY. SAFETY AND USABILITY WITHIN SENIORS LIVING ENVIRONMENT IS AN IMPORTANT ASPECT THAT WILL PROMOTE A SENSE OF SECURITY AND COMFORTABILITY WHICH ALLOWS FOR ENGAGEMENT WITHIN THE COMMUNITY.

GETTING INVOLVED WITH PROGRAMS AND ACTIVITIES CAN BE DIFFICULT WHEN THEY DO NOT HOLD ANY INTEREST OR ENGAGEMENT THEREFORE PROVIDING RELEVANT AND ENGAGING PLANS IS IMPORTANT. LEVASSEUR STATES, "SINCE OLDER ADULTS MIGHT BE MORE LIKELY TO BE MOBILE OR PARTICIPATE WHEN ACTIVITIES ARE MEANINGFUL TO THEM [99], THE IMPACT OF SEEING OTHER PEOPLE WALKING OR DOING SOCIAL ACTIVITIES SHOULD NOT BE UNDERESTIMATED... MOREOVER, INTEGRATING OLDER ADULTS INTO THEIR COMMUNITY CAN PROVIDE THEM WITH EMOTIONAL SUPPORT, MOTIVATION, INFORMATION, SOCIAL INTERACTION, FRIENDSHIP, SENSE OF BELONGING, ETC" (LEVASSEUR ET AL., 2015). THEREFORE, IT IS IMPORTANT TO ENGAGE SENIORS WITH ACTIVITIES SUITING FOR THEM SPECIFICALLY AND THE POWER OF SUGGESTION CAN CONTRIBUTE GREATLY TO THEIR OWN DESIRE TO TAKE PART IN ACTIVITIES.

THE IMPORTANCE OF FINDING PROGRAMS FOR SENIORS TO PARTAKE IN IS JUST THE FIRST STEP, THE SECOND STEP IS FINDING PHYSICAL FITNESS PROGRAMS THAT SENIORS CAN ROUTINELY PARTICIPATE IN. IT IS RECORDED IN THE STUDY THE EFFECTS OF A THERAPEUTIC YOGA PROGRAM ON POSTURAL CONTROL, MOBILITY, AND GAIT SPEED IN COMMUNITY-DWELLING OLDER

ADULTS HAVE AT LEAST TWO FALLS PER YEAR. 3 GROUP EXERCISE PROGRAMS DECREASE FALL FREQUENCY, INCREASE BALANCE, AND IMPROVE QUALITY OF LIFE IN THIS POPULATION" (KELLEY, AARON, HYND, MACHADO, & WOLFF, 2014). THIS RESEARCH OFFERS INCENTIVE TO NOT ONLY PARTICIPATE IN GROUP ACTIVITIES, WHICH IN TURN CREATES SOCIAL INTERACTION, BUT ALSO TO MANAGE THEIR PHYSICAL FITNESS TO PREVENT POTENTIAL PHYSICAL ACCIDENTS. PARTICIPATING IN GROUP EXERCISE PROGRAMS PROMOTES HEALTH AND AVERTS THE POTENTIAL FOR MISHAPS. ALONG WITH PREVENTING INJURIES, REGULAR EXERCISE PROGRAMS CAN REDUCE THE RISK OF CERTAIN DISEASES. THERE IS RELIABLE PROOF PROVIDED BY KOLBE-ALEXANDER THAT THERE ARE DIRECT CORRELATIONS BETWEEN REGULAR PHYSICAL ACTIVITY AND THE DECREASE IN SICKNESS AND DEATH (KOLBE-ALEXANDER ET AL., 2015). PROVIDING PROGRAMS, THAT VARY WITHIN SKILL LEVEL, ARE A SIMPLY YET EFFECTIVE WAY TO PROMOTE PHYSICAL ACTIVITY WITHIN SENIOR LIVING FACILITIES TO DECREASE THE CHANCE FOR MULTIPLE DISEASES.

A SENIOR LIVING FACILITY CARE SHOULD PROVIDE MORE



FIGURE 6

THAN A PLACE TO LIVE, IT SHOULD CONTRIBUTE OPPORTUNITIES TO LIVE A HAPPY AND ACTIVE LIFE. "SUCCESSIONAL AGING' IS REGARDED AS NOT ONLY PHYSICAL AND FUNCTIONAL HEALTH, BUT ALSO HIGH COGNITIVE FUNCTIONING AND ACTIVE INVOLVEMENT IN SOCIETY (ROWE & KAHN 1997). (TSE MMY, 2010). THIS DEFINITION IS WHAT IS NEEDED WHEN IT COMES TO THE CARE PROVIDED BY SENIOR LIVING FACILITIES. TSE CONTINUES ON TO SUGGEST THAT, "PEOPLE WITH GOOD HEALTH HABITS LIVE LONGER AND HEALTHIER, REDUCING THEIR CHANCES OF HAVING TO RELY ON THE MEDICAL SYSTEM" (HONG KONG POLICY RESEARCH INSTITUTE LTD 2006). (TSE MMY, 2010). RULE OF THUMB FOR EVERY

ONE, ESPECIALLY SENIORS, BECAUSE THE OLDER PEOPLE ARE THE LESS RESILIENT THEY BECOME. SENIORS MAY HAVE MORE DIFFICULTIES WHEN IT COMES TO MEDICAL PROCEDURES AND RECOVERY AND REHAB TIMES, THESE ARE NORMAL NOTIONS. MEDICAL PROCEDURES AND RECOVERY AND REHAB TIMES, THESE ARE NORMAL NOTIONS. THEREFORE ANYTHING THAT CAN PROMOTE HEALTHY LIVING SHOULD BE IMPLEMENTED INTO A DAILY LIFESTYLE.

THERE IS AN ACCEPTED CORRELATION BETWEEN THE NECESSITY TO BE ACTIVE AND THE CAPABILITY TO BE ACTIVE, AND THE NEED FOR THE NATURAL ENVIRONMENT. IT IS SUGGESTED THAT ACTIVITIES

ACCOMPANIED WITH PHYSICAL MOBILITY WHILE APPRECIATING AND BEING INVOLVED WITH THE OUTDOORS INCLUDE PHYSICAL "STRENGTH, AGILITY, AND STAMINA," THINGS THAT AS SENIORS AGE CAN DECLINE AS A NATURAL PROCESS (SUGIYAMA & WARD THOMPSON, 2007). ANYTHING THAT CAN IMPROVE AND PROLONG THE PHYSICAL MOBILITY IS SOMETHING THAT SHOULD BE MANDATORY AS PART OF A DAILY ROUTINE.





FIGURE 7

INTEGRATING NATURE INTO DAILY INTERACTIONS HAS NUMEROUS HEALTH BENEFITS NOT ONLY PHYSICALLY BUT MENTALLY AS WELL. IN THE ARTICLE WHAT IS THE EVIDENCE TO SUPPORT THE USE OF THERAPEUTIC GARDENS FOR THE ELDERLY? DETWEILER STUDY USING HORTICULTURE THERAPY, HT, INDICATES TO HAVE AN EFFECTIVE MEANS FOR IMPROVING SLEEP, AGITATION, AND COGNITION IN SENIORS. IT PROVES TO AID IN LEARNING NEW SKILLS, IMPROVE MEMORY, SENSE OF RESPONSIBILITY, AND SOCIAL INTERACTION. HT HAS SHOWN TO REDUCE STRESS, INCREASE THE FEELINGS OF CALM AND RELAXATION, AND NURTURE SENSE OF ACCOMPLISHMENT AND SELF-ESTEEM. NINE OUT OF TEN CASES DISPLAY IMPROVEMENTS IN SELF-ESTEEM WHEN INVOLVEMENT IN ACTIVITIES IN GREEN SETTINGS. (DETWELER ET AL., 2012). MANY ASPECTS OF HEALTH CAN ASSISTANCE IN A POSITIVE WAY WHEN HT TECHNIQUES ARE IMPLEMENTED INTO SENIOR'S DAILY ROUTINES.

ONE OF THE MORE HANDS ON ASPECTS OF INTEGRATING NATURE INTO RESIDENT'S LIVES IS GARDENING, THIS IS PROVEN IN A STUDY PERFORMED. GARDENING HAS MANY BENEFITS AS A HOBBY FOR ONE, IT GETS RESIDENTS UP AND OUT OF THE HOUSE WHILE TENDING TO IT. IT ALLOWS FOR THE RESIDENTS TO

OWN FRUITS, VEGETABLES, AND HERBS IF DESIRED. THIS COULD ALSO OPEN UP THE OPPORTUNITY FOR INVOLVEMENT IN THE LOCAL FARMERS MARKETS, SOMETHING THAT HAS MORE BENEFITS THAN SIMPLY INVOLVEMENT IN THE COMMUNITY. GARDENING ALSO HAS THE SIMPLE PLEASURE ASPECT TO IT, GARDENING CAN BE A FUN AND REWARDING ACTIVITY TO PARTICIPATE IN. (WICKS, 2012). RESULTS FOUND IN A STUDY PERFORMED ON SENIORS ENGAGING IN DAILY GARDENING ACTIVITIES SHOWED POSITIVE RESULTS.

IN THE ARTICLE DESIGNING FOR LIVING THEY FOCUS ON THE ARGUMENT THAT

EVEN THOUGH IT IS A KNOWN FACT THAT NATURAL OUTDOOR ENVIRONMENTS ARE ESSENTIAL TO PHYSICAL AND MENTAL WELLBEING, IT IS A NEW AREA OF STUDY WHEN IT IS BEING IMPLEMENTED INTO THE LIVING ENVIRONMENTS AS A WELLNESS AID (WICKS, 2012). THIS IS AN INTERESTING CONCEPT CONSIDERING AT ONE POINT ALL DWELLERS HAD TO RELY ON THE NATURAL OUTDOOR ENVIRONMENT, BUT NOW THE CONCEPT IS COMING BACK AND BEING STUDIED AND THEN IMPLEMENTED INTO PRACTICE AS A MEAN OF PROMOTING HEALTH AND WELLNESS. THERE ARE WAYS OF DESIGNING THAT CAN CAPTURE THE NATURAL ENVIRONMENT AND IMPLEMENT IT INTO THE PROGRAM OF THE BUILDING. SENIOR LIVING SHOULD INTEGRATE NATURAL DESIGN ELEMENTS LIKE PASSIVE SYSTEMS TO PROMOTE HEALTH AND HEALING IN THE DESIGN PROGRAM. DESIGN STRATEGIES LIKE NATURAL LIGHT, GREEN SPACES AND PATHS, AND CROSS VENTILATION CAN BE USED TO ENCOURAGE WELLNESS PHYSICALLY AND MENTALLY (WICKS, 2012). ANOTHER ASPECT THAT CAN BE CONSIDERED IS CREATING VIEWS TO THE OUTSIDE

THEREFORE CONNECT THE RESIDENT TO THEIR SURROUNDINGS. SUSTAINABLE STRATEGIES INCLUDING SOLAR PANELS, RAINWATER CAPTURE, HARNESSING GEOTHERMAL ENERGY, AND WIND ENERGY ARE ALL NATURAL APPROACHES THAT COULD BE IMPLEMENTED INTO A SENIOR LIVING DESIGN

THROUGH THE DESIGN APPLICATIONS OF CONNECTIVITY BY MEANS OF PROPERLY AND SPECIFICALLY CONSIDERED ACCESSIBILITY, PRODUCING A STRONG SENSE OF COMMUNITY, AND INCORPORATING NATURE THROUGH THE SENSES SENIOR LIVING FACILITIES CAN BE NOT ONLY A PLACE OF LIVING BUT A PLACE OF THRIVING. ACCESSIBLE DESIGN IS ONE OF THE CORE DESIGN INTENTION WHEN CONSIDERING AN IMPROVED TYPE OF SENIOR LIVING FACILITY, IT PROMOTES EASE WHILE MAKING RESIDENTS LIVES SIMPLER AND SUPPORTS WELLNESS. LINKING SENIORS TO THEIR SURROUNDINGS TO PROMOTE INDEPENDENCE AND A HEALTHY SOCIAL LIFE IS A DYNAMIC WAY TO ENCOURAGE HEALTHY HABITS. INCORPORATING NATURE INTO THE DESIGN OF A SENIOR LIVING FACILITY HAS MULTIPLE BEN

EFITS FOR HEALTH, HEALING, AND ENGAGEMENT AMONG ITS RESIDENTS. COLLABORATIVELY THESE ELEMENTS TOGETHER HAVE THE POTENTIAL TO CREATE A SENIOR LIVING FACILITY THAT PROMOTES CURRENT AND CONTINUED OVERALL WELLNESS FOR ITS RESIDENTS.

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DEWEILER, M. B., SHARMA, T., DEWEILER, J. G., MURPHY, P. F., LANE, S., CARMAN, J., ... KIM, K. Y. (2012). WHAT IS THE EVIDENCE TO SUPPORT THE USE OF THERAPEUTIC GARDENS FOR THE ELDERLY? PSYCHIATRY INVESTIGATION, 9(2), 100–110. [HTTP://DOI.ORG/10.4306/PI.2012.9.2.100](http://doi.org/10.4306/pi.2012.9.2.100)

THIS ARTICLE FOCUSES ON HORTICULTURE THERAPY, HT, AND ITS BENEFITS IN THERAPEUTICALLY AND REHABILITATION APPLICATIONS IN THE AGING SENIOR POPULATION, AND HOW IT CAN PREVENT THE HIGH COST OF CONVENTIONAL MEDICAL OPTIONS. DEWEILER STUDIES THE CORRELATION BETWEEN HT METHODS USED AND THE EFFECTS ON SENIORS IT PROVIDES MULTIPLE PHYSICAL AND MENTAL BENEFITS OF HT APPLICATIONS AND HOW IT CAN SUPPORT LONG-TERM CARE AND RECOVERY.

GRANBOM, M., IWARSSON, S., KYLBERG, M., PETTERSSON, C., & SLAUG, B. (2016). A PUBLIC HEALTH PERSPECTIVE TO ENVIRONMENTAL BARRIERS AND ACCESSIBILITY PROBLEM FOR SENIOR CITIZENS LIVING IN ORDINARY HOUSING. BMC PUBLIC HEALTH, 16. [HTTP://DOI.ORG/10.1186/S12889-016-3369-2](http://doi.org/10.1186/s12889-016-3369-2)

THIS RESEARCH ARTICLE EXPLORES THE PHYSICAL MOBILITY IN AND AROUND ORDINARY HOUSING AND FURTHER LOOKS INTO HOW IT CAN HAVE NEGATIVE EFFECTS OF SOCIAL PARTICIPATION AND HEALTH. THE STUDY INVESTIGATES THE SPECIFIC HOUSEHOLD BARRIERS AND OBSTACLES WITHIN A STANDARD HOME AND HOW THEY IN TURN AFFECT THE RESIDENT. A KEY FOCUS WAS THE TYPE OF THE HOMES AND THE YEAR THEY WERE BUILT. THIS ARTICLE EXPLORED DIFFERENT TYPES OF HOMES WITH RESIDENTS OF DIFFERENT PHYSICAL CAPABILITIES TO PROVIDE EVIDENCE FOR COMMON HOUSEHOLD BARRIERS EXPERIENCED BY THE AGING POPULATION.

(2014). THE EFFECTS OF A THERAPEUTIC YOGA PROGRAM ON POSTURAL CONTROL, MOBILITY, AND GAIT SPEED IN COMMUNITY-DWELLING OLDER ADULTS. JOURNAL OF ALTERNATIVE AND COMPLEMENTARY MEDICINE (NEW YORK, N.Y.), 20(12), 949–954. [HTTP://DOI.ORG/10.1089/ACM.2014.0156](http://doi.org/10.1089/acm.2014.0156)

THIS JOURNAL ARTICLE REVIEWS THE EFFECTS OF A TWELVE WEEK YOGA PROGRAM PERFORMED BY SENIORS. THE TRIAL WAS OVERALL SUCCESSFUL IN MANY WAYS INCLUDING CONSISTENT PARTICIPATION BY MEMBERS AND IMPROVEMENTS IN PHYSICAL CAPABILITIES OF PARTICIPANTS. THE STUDY WAS TARGETING COMMUNITY DWELLING OLDER ADULTS, AND HOW A WEEKLY PROGRAM CAN HAVE A POSITIVE EFFECT ON THEIR QUALITY OF LIFE.

KELLEY, K. K., AARON, D., HYND, K., MACHADO, E., & WOLFF, M. KOLBE-ALEXANDER, T. L., PACHECO, K., TOMAZ, S. A., KARPUL, D., & LAMBERT, E. V. (2015). THE RELATIONSHIP BETWEEN THE BUILT ENVIRONMENT AND HABITUAL LEVELS OF PHYSICAL ACTIVITY IN SOUTH AFRICAN OLDER ADULTS: A PILOT STUDY. BMC PUBLIC HEALTH, 15, 518. [HTTP://DOI.ORG/10.1186/S12889-015-1853-8](http://doi.org/10.1186/s12889-015-1853-8)

THIS STUDY REVIEWS THE IDEAS THAT THE BUILT ENVIRONMENT THAT SENIORS ARE IN PLAYS A ROLE IN THEIR PHYSICAL ACTIVITY AND DEMONSTRATE THE IMPORTANCE OF THE CORRELATION IN LOW INCOME SENIORS IN SOUTH AFRICA. ELEMENTS INCLUDING STREET CONNECTIVITY, AESTHETICS, AND SAFETY WERE CONSIDERED INTO THE STUDY. THE RESULTS CONCLUDED THAT SENIORS LIVING IN LOWER-INCOME NEIGHBORHOODS PARTICIPATE IN TRANSPORT-RELATED ACTIVITY, FACTORS INCLUDING VEHICLE OWNERSHIP AND SELF-PERCEPTIVE HEALTH STATUS PROVED TO LESSEN PHYSICAL ACTIVITY LEVEL. THE BUILT ENVIRONMENT CAN HAVE CONTRIBUTING FACTORS TO SENIOR'S PHYSICAL ACTIVITY.

LEVASSEUR, M., GÉNÉREUX, M., BRUNEAU, J.-F., VANASSE, A., CHABOT, É., BEAULAC, C., & BÉDARD, M.-M. (2015). IMPORTANCE OF PROXIMITY TO RESOURCES, SOCIAL SUPPORT, TRANSPORTATION AND NEIGHBORHOOD SECURITY FOR MOBILITY AND SOCIAL PARTICIPATION IN OLDER ADULTS: RESULTS FROM A SCOPING STUDY. BMC PUBLIC HEALTH, 15, 503. [HTTP://DOI.ORG/10.1186/S12889-015-1824-0](http://doi.org/10.1186/s12889-015-1824-0)

THIS RESEARCH ARTICLE EXPLORED THE KEY FACTORS IN MOBILITY AND SOCIAL PARTICIPATION IN OLDER ADULTS AND REVIEWED THE ASSOCIATION OF THE SURROUNDING NEIGHBORHOOD COMMUNITY AS A CONTRIBUTING FORCE ON THIS MATTER. A FORMAL RESEARCH WAS CONDUCTED AND REVIEWED, WITH THE FINDINGS THAT MOBILITY AND SOCIAL PARTICIPATION WERE POSITIVELY ASSOCIATED WITH CLOSENESS OF THINGS LIKE SERVICES AND PUBLIC TRANSPORTATION, AND NEGATIVELY ASSOCIATED WITH THINGS LIKE POOR USER-FRIENDLINESS AND NEIGHBORHOOD INSECURITY. THE INFORMATION FOUND PROVIDES INNOVATIVE DESIGN SOLUTIONS FOR SENIOR LIVING ENVIRONMENTS THAT SUPPORT A HIGH QUALITY OF LIFE.

SUGIYAMA, T., & WARD THOMPSON, C. (2007). OUTDOOR ENVIRONMENTS, ACTIVITY AND THE WELL-BEING OF OLDER PEOPLE: CONCEPTUALIZING ENVIRONMENTAL SUPPORT. ENVIRONMENT & PLANNING A, 39(8), 1943–1960.

THIS RESEARCH ARTICLE REVIEWS HOW THE OUTDOOR ENVIRONMENT HAS A POSITIVE EFFECT ON THE LIVES OF OLDER PEOPLE. THE STUDY PERFORMED PROVIDES RESEARCH INTO THE IDEAS THAT NEIGHBORHOODS WITH A SOLID INFRASTRUCTURE MAKE OUTDOOR ACTIVITIES POSSIBLE AND CAN ENCOURAGE A HIGHER QUALITY OF LIFE. THE RESEARCH PROVIDES INSIGHT INTO THE BENEFITS OF THE OUTDOORS AND PHYSICAL ACTIVITY, NATURE, AND SOCIAL INTERACTION. THIS RESEARCH REVIEWS THE BENEFITS OF THE OUTDOORS AND THE EFFECTS IT CAN HAVE ON OLDER PEOPLE.

TEPPER, D. (2016). MAKING A HOUSE AN ACCESSIBLE HOME. PT IN MOTION, 22–32.

THIS ARTICLE SUPPORTS AND ADVOCATES FOR UNIVERSAL DESIGN, UD, TO BE IMPLEMENTED IN HOMES TO SUPPORT RESIDENTS CONTINUED ACCESSIBILITY. COMMON KNOWLEDGE OF MULTIPLE PHYSICAL THERAPISTS ADVOCATE FOR THIS AS WELL, AND ENCOURAGE DESIGN THAT NOT ONLY MEETS THE CURRENT NEEDS OF ONE SPECIFIC INDIVIDUAL BUT ALLOWS FOR THE NEEDS OF ALL, NO MATTER THEIR PHYSICAL ABILITIES. AGING IN PLACE IS APPLAUDED, MAKING A CURRENT RESIDENCE ACCESSIBLE, BUT THE NOTION OF NEW CONSTRUCTION SIMPLY INTEGRATING DIFFERENT IDEAS OF UD INSTEAD OF ONLY APPLYING ADA IS A SUGGESTED GREATLY.

TSE MMY. (2010). THERAPEUTIC EFFECTS OF AN INDOOR GARDENING PROGRAMME FOR OLDER PEOPLE LIVING IN NURSING HOMES. JOURNAL OF CLINICAL NURSING, 19(7/8), 949–958. [HTTP://DOI.ORG/10.1111/J.1365-2702.2009.02803.X](http://doi.org/10.1111/j.1365-2702.2009.02803.x)

THIS JOURNAL EXAMINES THE DAILY ACTIVITIES OF AND THE PSYCHOLOGICAL HEALTH OF OLDER PEOPLE LIVING IN NURSING HOMES WHILE IMPLEMENTING A GARDENING PROGRAM TO SEE THE EFFECTS. THE CORE COMPONENTS REVIEWED OVER THE COURSE OF THE STUDY WERE SOCIALIZATION, SATISFACTION, LONELINESS. THEY ADDRESS THE CORRELATION BETWEEN SEDIMENTARY ACTIVITIES AND THE DECLINE IN FUNCTION. THE RESULTING INFORMATION CAME FROM A STUDY PERFORMED OVER THE PERIOD OF EIGHT WEEKS WHICH INVOLVED PARTICIPATING IN GARDENING ACTIVITIES. THE RESULTS OF THE STUDY WERE AS EXPECTED, ELEVATED FEELINGS OF HAPPINESS WITH LIFE AND SOCIAL INTERACTION AND A DECREASE IN FEELINGS OF ISOLATION AND LONELINESS.

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P RECEDENT:  
PRECEDENT NARRATIVE  
THE FOLLOWING CASE STUDIES PROVIDE VALUED  
AND SUCCESSFUL DESIGN ELEMENTS THAT OF-  
FER INSIGHT INTO THIS THESIS. WHEN RESEARCH-  
ING SENIOR LIVING FACILITIES MANY TYPES HAVE  
PROVEN SUCCESSFUL AND NOT SUCCESSFUL, FROM  
RETIREMENT HOMES ALL THE WAY TO NURSING HOMES.



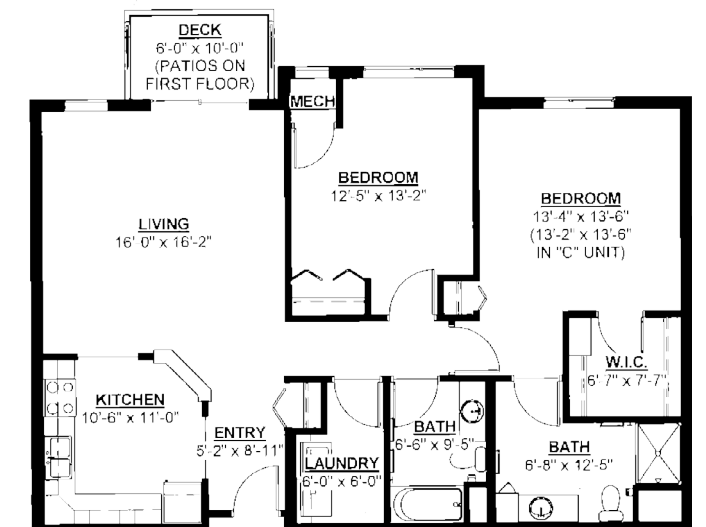


FIGURE 8



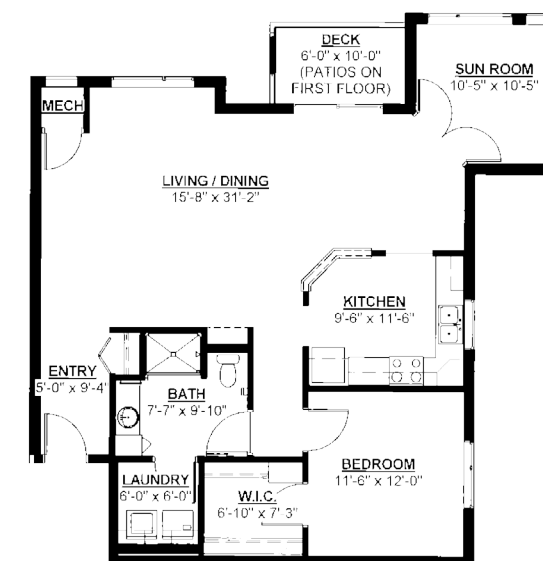
ASH: ONE BEDROOM 736 SQ.FT.

FIGURE 9



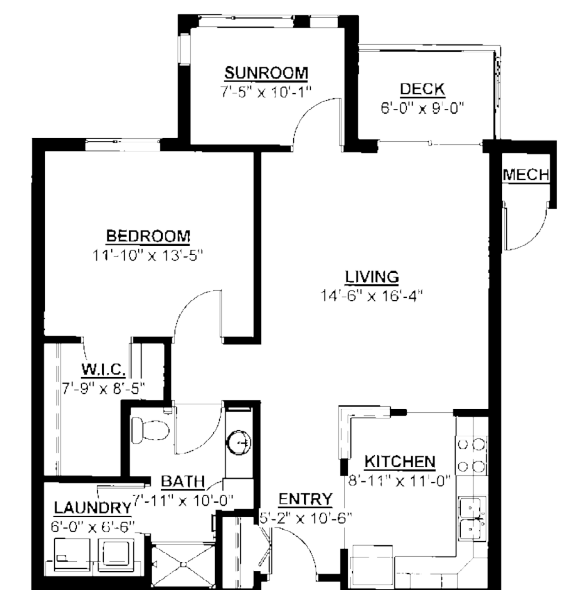
SPRUCE: TWO BEDROOM 1,256 SQ.FT.

FIGURE 11



DOUGLAS: ONE BEDROM SUN-ROOM 931 SQ.FT.

FIGURE 10



HICKORY: ONE BEDROOM/SUN-ROOM 1,160 SQ.FT.

FIGURE 12

# WOODLAND HILL:

ARCHITECT: POPE ARCHITECTS

YEAR COMPLETED: 2016

LOCATION: HUDSON, WI

279,000 SQ.FT. SENIOR LIVING +  
6,100 SQ.FT. MEDICAL SUITE

95 SENIOR APARTMENTS  
46 ASSISTED LIVING  
19 MEMORY CARE

VALUE:  
CHRISTIAN MINISTRY READY & ENGAGED PEOPLE OPERATIONAL  
INTEGRITY SERVICE AND EXCELLENCE STEWARDSHIP

VISION:  
TO PROVIDE MORE CHOICES AND OPPORTUNITIES FOR MORE  
OLDER ADULTS TO LIVE WELL

# CONCLUSION:

THE DESIGN INTENTIONS OF WOODLAND HILLS SENIOR LIVING FACILITY VALUE ASPECTS INCLUDING COMMUNITY, FAITH, AND PROMOTING HEALTHY AGING. THIS IS ACHIEVED BY PROVIDING SPACES TO ACTIVELY PARTICIPATE AND ACT UPON THESE VALUES. THEY PROVIDE ACCESSIBLE DWELLING UNITS ALONG WITH ROOMS FOR WORSHIP AND ROOMS FOR WELLNESS. THEY HAVE OUTDOOR SPACES INCLUDING WATER FEATURES ALONG WITH WALKING PATHS AND SEATING AREAS THAT ALLOW FOR OUTDOOR ACTIVITY. THE COLORS USED THROUGHOUT THE LIVING FACILITY ARE CALMING AND NATURAL COLORS. THE USE OF LARGE AND LARGE WINDOWS ALLOW FOR NATURAL LIGHT INTO THE INDOOR SPACES.



FIGURE 13



FIGURE 14





FIGURE 15

# MARYVILL NURSING HOME

ARCHITECT: ANKROM MOSIAN

YEAR COMPLETED: 2015

LOCATION: BEAVERTON, OR

11,685 SQ.FT.

MEMORY CARE  
LONG TERM CARE  
REHABILITATION

MISSION:  
PROMOTING THE HEALTH OF THOSE WHO ARE MADE INFIRM BY  
DISABILITY OR AGE  
RESPECTING HUMAN DIGNITY IN THE EXPERIENCE OF SICKNESS  
AND DEATH  
FOSTERING THE PHYSICAL, PSYCHOLOGICAL, EMOTIONAL, SPIRITUAL, AND SOCIAL WELL-BEING OF PEOPLE.



FIGURE 16



FIGURE 17

## CONCLUSION:

ONE OF THIS FACILITIES DESIGN FOCUSES IS NATURAL LIGHT, THIS IS DONE BY CLEAR-STORY WINDOWS AND LARGE-SPAN WINDOWS. BY ALLOWING FOR AMPLE NATURE LIGHT THIS PROVIDES OPPORTUNITIES FOR LESS ARTIFICIAL LIGHTS TO BE USED DURING THE DAY, SAVING ON ELECTRICITY. NATURAL DAY LIGHT ALSO PROVIDES A SOFTER LIGHT TO THE RESIDENTS THAT IS NOT AS HARSH AS ARTIFICIAL LIGHTING OPTIONS. THE USE OF THE WOOD PROVIDES A SOFT AND COMFORTING FEEL TO THE FACILITY THAT ALSO HAS A DESIRABLE AESTHETIC TO IT. PLAYING OFF OF THE USE OF WOOD IS THE USE OF LIGHT COLORS. WITH THE MATERIAL CHOICE AND COLORS USED THIS LIVING FACILITY PROVIDES A CALM AND SOOTHING LOOK THAT CAN OFFER THE RESIDENTS AND SHORT TERM STAY PATIENTS WITH A SENSE OF EASE.





FIGURE 18

# CONCLUSION:

CONSIDERING THE LOCATION AMONG HOUSING UNITS DROVE THE EXTERIOR DESIGN WHICH RESEMBLES MULTIPLE HOUSING UNITS CONNECTED BY CORRIDORS. INTEGRATING ANY DESIGN WITHIN THE COMMUNITY IS IMPORTANT. THIS ALLOWS FOR THE DEVELOPMENT TO CONTINUE KEEP THE RESIDENTIAL LOOK WHILE MAKING THE RESIDENTS OF THE ELDERLY ESTABLISHMENT FEEL AT HOME AS WELL, AS THEY DO NOT STICK OUT VISUALLY. THIS ESTABLISHMENTS CONSIDERED THE IMPORTANCE OF OUTDOOR SPACES. THEY PROVIDE WALKWAYS, SEATING, AND GREEN ELEMENTS. THIS CREATES A COMPLETE SPACE THAT ALLOWS FOR OUTDOOR ENGAGEMENT.

## ST BRIEUC'S ELDERLY ESTABLISHMENT:

ARCHITECT: NOMADE ARCHITECTS

YEAR COMPLETED: 2014

LOCATION: SAINT BRIEUC, FRANCE

5,000 SQ.FT.

ELDERLY HOUSING

GOALS:  
TO INTEGRATE INTO RESIDENTIAL SURROUNDINGS  
CREATE A COMFORTABLE AND SOCIAL ENVIRONMENT TO ALL  
RESIDENTS RESPECT INDIVIDUALITY AND PRIVACY



FIGURE 19



FIGURE 20



# P R O G R A M : P R O G R A M N A R R A T I V E

THE PROGRAM FOR THE SENIOR LIVING FACILITY CONSISTS OF TWO DIFFERENT TYPES OF SPACES: ONE PRIVATE TO THE RESIDENTS AND ONE PUBLIC TO THE COMMUNITY. THE GOAL IS TO PROVIDE COMFORTABLE LIVING ACCOMMODATIONS TO SENIORS WHILE PROVIDING THE RESIDENTS AND COMMUNITY SPACES TO ENGAGE AND INTERACT WITH EACH OTHER. THIS INTENTION IS DRIVEN FORM THE IDEA THAT THE TYPES OF SPACES PROVIDED TO SENIORS CAN SHAPE THE TYPE OF LIFESTYLE THEY CHOSE TO PARTICIPATE IN. THEREFORE, THE MORE INTERACTIVE, PRODUCTIVE, AND BEAUTIFUL SPACES ARE, THE GREATER CHANCE IT CAN LEAD TO A HEALTHIER LIFESTYLE.

## F U N C T I O N

SINCE THE MOTIVATION OF THE DESIGN WILL BE DRIVEN BY CONNECTIVITY THOUGH ACCESSIBILITY, COMMUNITY, AND NATURE THE SENIOR LIVING FACILITY MUST PROVIDE FOR FLUIDITY THROUGHOUT THE EXECUTION OF THE DESIGN WITHIN THE SITE AND EXTENDING INTO THE COMMUNITY. SINCE A FOCUS OF THE DESIGN IS ACCESSIBLE DESIGN THE SENIOR LIVING FACILITY SHOULD ALLOW FOR UNIVERSAL USE TO PEOPLE OF ANY PHYSICAL ABILITY, INCLUDING HANDICAPPED PEOPLE, THROUGHOUT THE ENTIRETY OF THE DESIGN. SINCE A FOCUS OF THE DESIGN IS ON INTEGRATING WITHIN THE COMMUNITY THE SENIOR LIVING FACILITY SHOULD PROVIDE OPPORTUNITY TO NOT ONLY SUPPORT THE IMMEDIATE RESIDENTS OF THE FACILITY BUT THE RESIDENTS OF THE COMMUNITY AS WELL.

## F O R M

CONSIDERING THE GOAL IS TO CONNECT THE RESIDENTS TO THE EVERYDAY CONVENIENCES PROVIDED WITHIN THE TOWN THE SENIOR LIVING FACILITY MUST RESPOND WITH PROPER LOCATION WITHIN THE COMMUNITY. SINCE THE PROPOSED LOCATION IS EMPTY THE SENIOR LIVING FACILITY SHOULD CREATE GREENERY BY MEANS OF GARDENS, PATHS, AND SUSTAINABLE DESIGNS.

## E C O N O M Y

SINCE THE PROPOSED SENIOR LIVING FACILITY IS IN THE ISSAQUAH HIGHLANDS IT MUST PROVIDE OPPORTUNITY FOR ALL-LEVEL INCOME RESIDENTS, AS IS PROVIDED AMONG THE OTHER HOUSING OPTIONS WITHIN THE COMMUNITY. SINCE THE SENIOR LIVING FACILITY IS PROPOSED TO BE CONSTRUCTED IN A NEW UP AND COMING TOWN THAT VALUES SUSTAINABLE DESIGN THE QUALITY OF MATERIALS, INCLUDING ASPECTS LIKE

LEAD TIME, MUST BE OF HIGH LEVEL ALONG WITH THE CONSIDERATION OF CONSTRUCTION MANAGEMENT, WASTE CONTROL, AND RECYCLABILITY.

## T I M E

SINCE THE SENIOR LIVING FACILITY HAS UNDEVELOPED LAND NEXT TO THE PROPOSED SITE, DEDICATED TO FUTURE DEVELOPMENT OF ISSAQUAH HIGHLANDS, THIS LOCATION SHOULD PROVIDE OPPORTUNITIES FOR CONNECTIVITY TO THE DEVELOPMENT IN THE FUTURE WHILE ALLOWING FOR

THE FUTURE DEVELOPMENT TO FURTHER SUPPORT THE GOALS OF A SENIOR LIVING FACILITY ALONG WITH THE COMMUNITY OF ISSAQUAH HIGHLANDS ITSELF. SINCE THE LIVING FACILITY HAS MANY PURPOSED GREEN FEATURES AMONG THE SITE THE SENIOR LIVING / ASSISTED LIVING FACILITY SHOULD PROVIDE OPPORTUNITY FOR GROWTH AND FUTURE SUSTAINABLE DESIGNS.

SPACE LIST

Function	People	Capacity	No. of Units	Area/Units	Net Area	Net Area Subtotal
Entry						
Reception/Displays	4	8	1			
Subtotal						
Staff Services						
Private rooms	3	5	2	200	400	
Offices	3	3	2	250	500	
Work Stations	3	3	3	300	900	
Break Room	3	8	1	450	450	
Nurses Stations	5	5	2	450	1000	
Restrooms	1	1	2	110	220	
Daycare	10	10	1	850	850	
Subtotal		35			4,320	
Residential Ammenities						
Library/Media Center	10	10	1	580	580	
Worship room	15	30	1	450	450	
Salon	3	3	1	280	280	
Rec Room	30	50	1	1,500	1,500	
Convenience Store/Café	12	12	1	300	300	
Green House	8	8	1	300	300	
Subtotal		78			3410	
Wellness Center						
Changing Room	6	12	2	400	800	
Steam room	6	6	1	200	200	
Sauna	2	8	2	100	200	
Yoga/Aerobic Studio	15	15	2	1500	3000	
Bathroom	6	6	2	145	290	
Subtotal		47			4,490	
Living Spaces						
Residential Suite 1	20	40	20	920	18,000	
Residential Suite 2	10	20	10	1,230	12,300	
Assisted Living Suites	12	24	12	760	9,120	
Common Room	30	50	1	700	700	
Subtotal		104			22,138	
Residential Dining						
Seating	45		1			
Serving	2		1			
Kitchen	5		1			

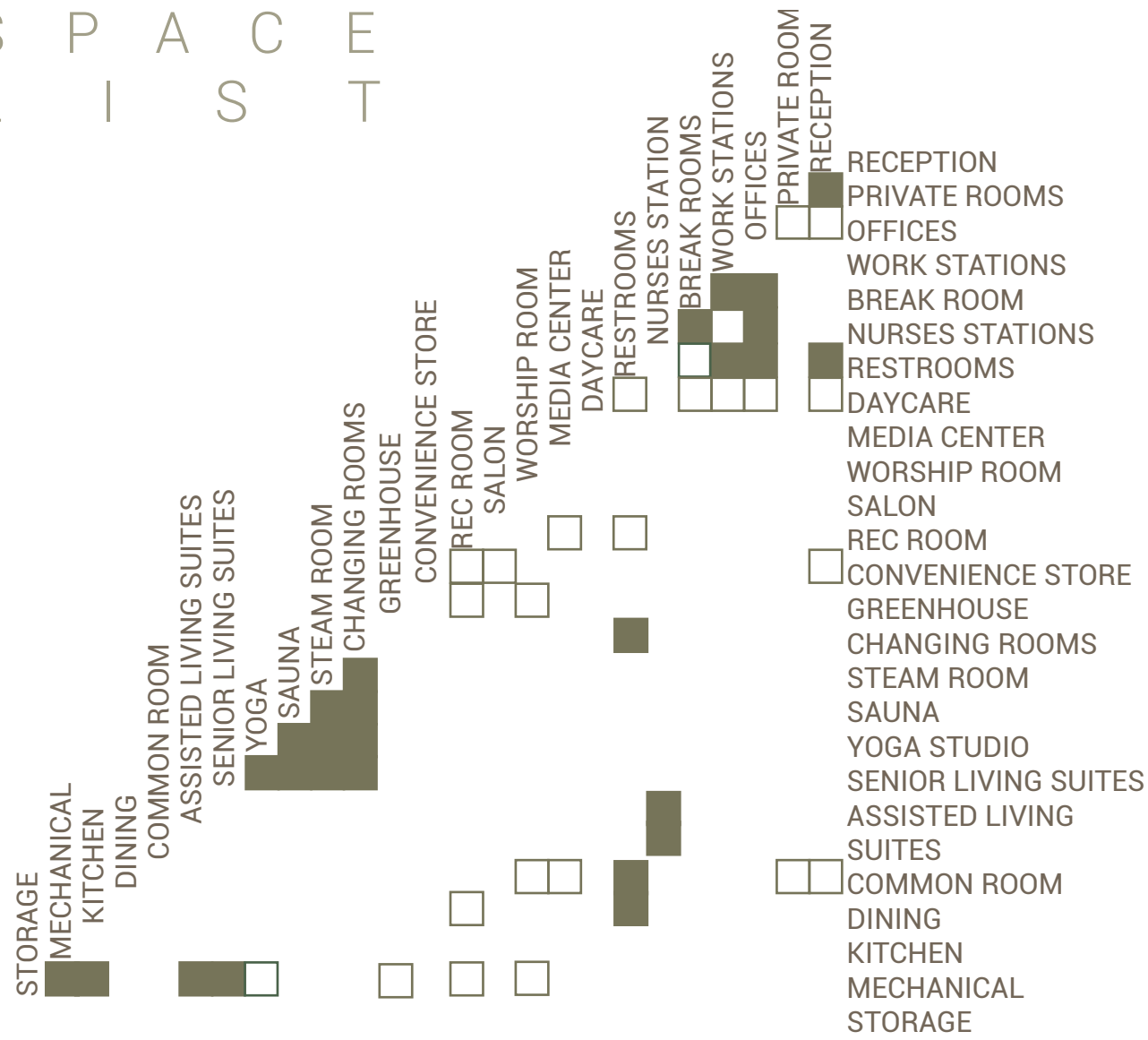
FIGURE 21

LAND USE REQUIREMENTS

Land Use Area		PHASE 1					
		PEOPLE	GROSS AREA	FLOOR	BUILDING FOOTPRINT	GAC	LAND AREA
SENIOR LIVING FACILITY		PEOPLE					
Senior Living		140	34,358	3	17,179	14%	124,000
Parking							
	Staff	30	11,400	1	11,400	9%	124,000
	RESIDENTS	50	19,000	1	19,000	15%	124,000
	Visitor	15	5,700	1	5,700	5%	124,000
	Service	1	380	1	380	1%	124,000
		140	70,838		104,959		

FIGURE 22

# SPACE LIST



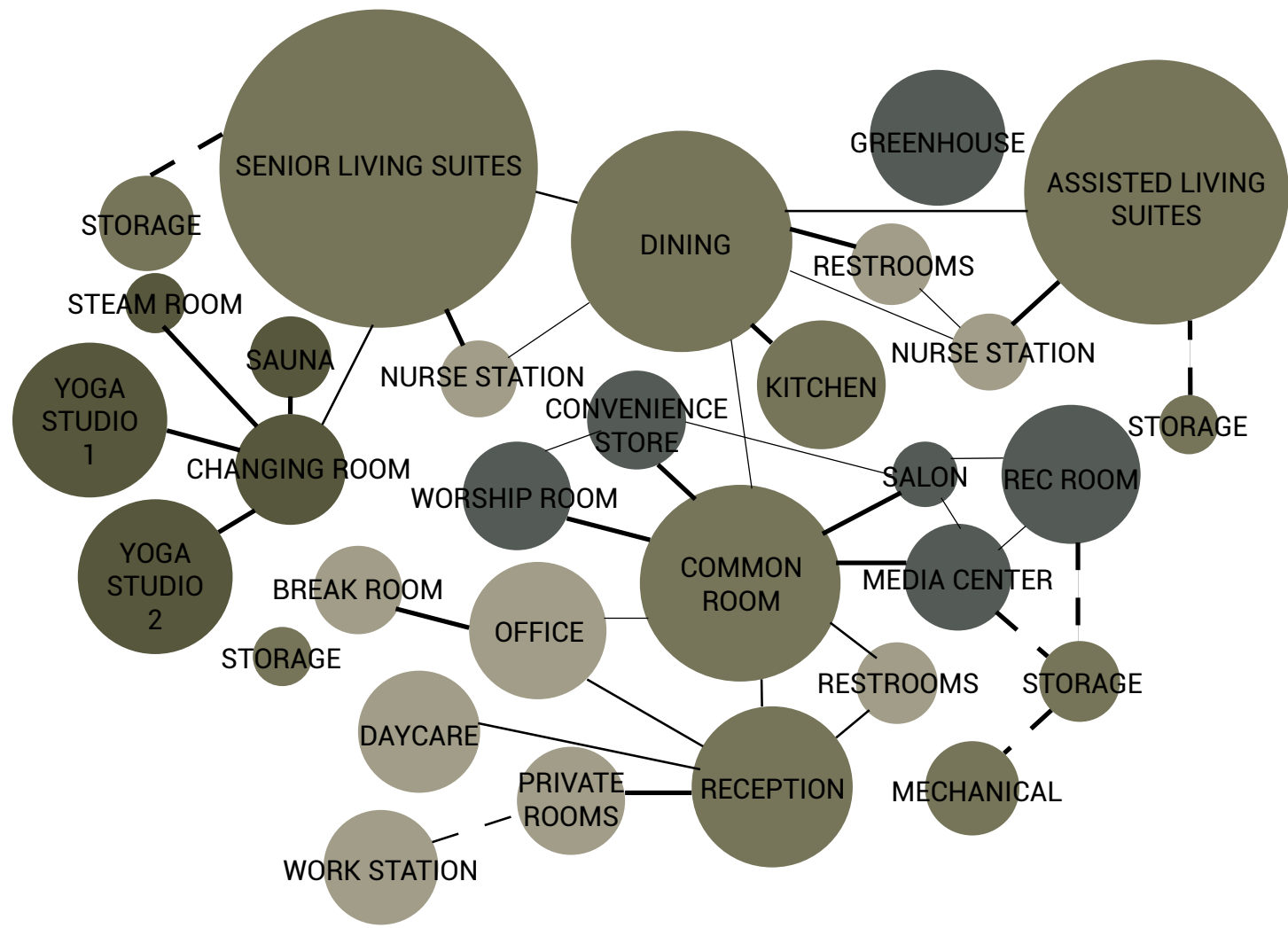
KEY

MANDATORY

DESIRABLE

FIGURE 23

# SPACE CONCEPT



KEY

STRONG CONNECTION

MEDIUM CONNECTION

LIGHT CONNECTION

PRIVATE CONNECTION

# SITE:

## SITE NARRATIVE

THE SITE IS ONE OF THE DRIVING FACTORS IN THIS THESIS, THIS SITE WAS CHOSEN BECAUSE IT MET ALL THE REQUIREMENTS I NEEDED TO SUPPORT THE DESIGN INTENTIONS. THIS SITE IS SURROUNDED BY THE INFRASTRUCTURE TO SUSTENANCE THE TYPOLOGY CHOSEN FOR THIS THESIS WHILE INCLUDING THE DESIRED VISTAS AND VEGETATION DESIRED. THIS SITE IS LOCATED IN A REGION I HAVE NEVER RESEARCHED BEFORE THEREFORE LEARNING ABOUT THE SUSTAINABLE TECHNOLOGIES OF THE PLACE WILL GREATLY IMPACT THE OVERALL DESIGN. THE SITE IS NOW VACANT, BESIDES LITTLE PLANT LIFE, AND IS DESIGNATED AS FUTURE DEVELOPMENT TO THE TOWN, THEREFORE NO EXISTING STRUCTURES WILL BE DISTURBED BY THIS THESIS. THIS THESIS WILL EXAMINE WAYS TO INCORPORATE ELEMENTS OF THE SURROUNDING TOWN WHILE INTEGRATING IT INTO THE NATURAL ELEMENTS OF THE PLACE.

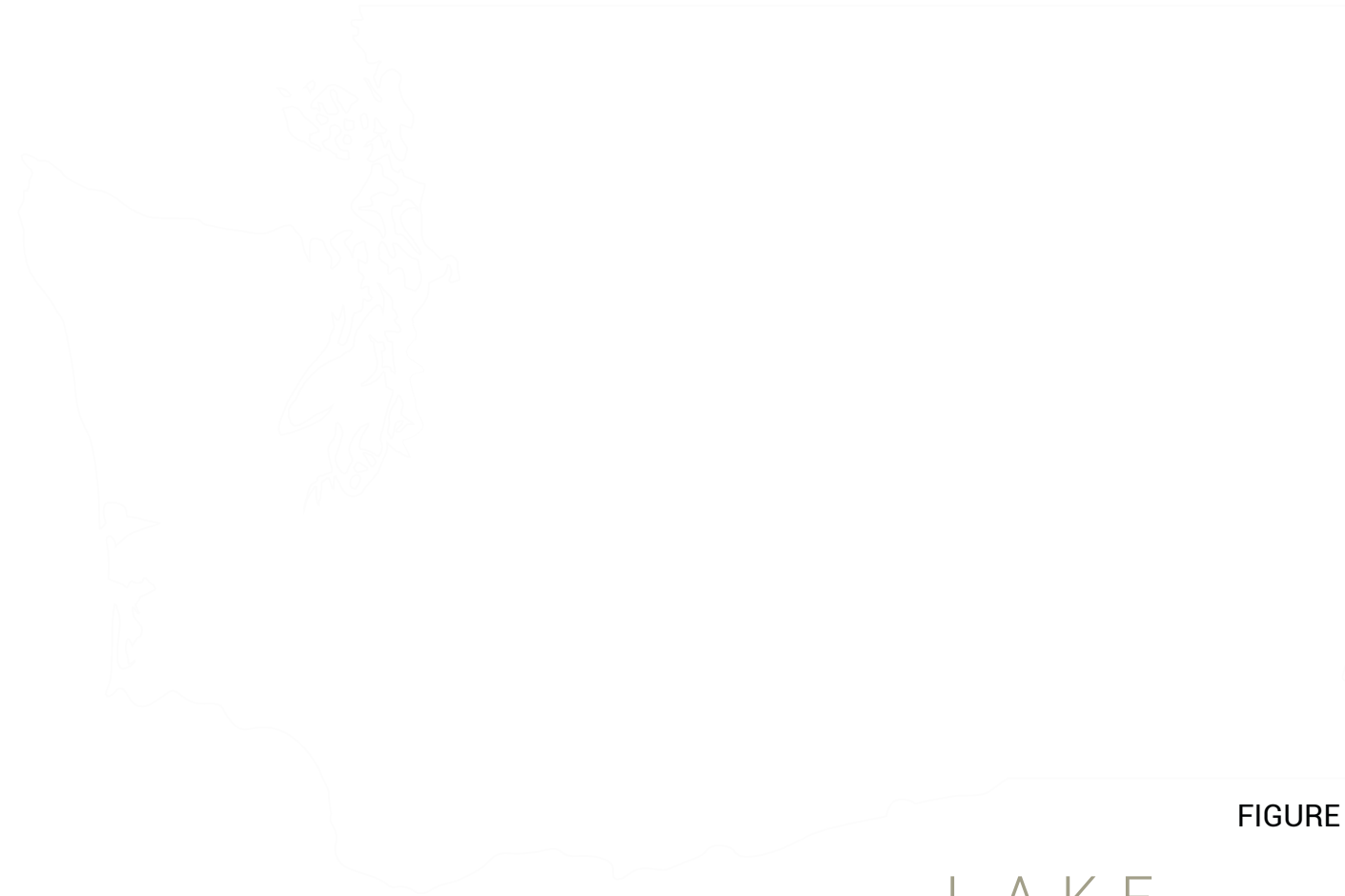


FIGURE 25

## LOCATION

COUNTY: KING COUNTY  
INCLUDES 2,117,125 PEOPLE WITH 12.4% OF THOSE PEOPLE BE-  
ING 65 YEARS AND OLDER.  
ISSAQUAH HIGHLANDS, WA 98029  
HOUSES A POPULATION OF 34,950 PEOPLE. THERE AREA TOTAL  
OF 4 SENIOR LIVING FACILITIES AND ONLY 1  
ASSISTED LIVING FACILITIES WHICH PROVIDE OPPORTUNITY FOR  
THE NEED OF SENIOR HOUSING.  
MISSION :  
"ISSAQUAH HIGHLANDS COMBINES THE CONVENIENCE AND EX-  
CITEMENT FOUND IN DENSE CITIES WITH THE QUALITY OF LIFE  
FOUND IN THE SUBURBS. ENVIRONMENTALLY SENSITIVE WITH  
SAFE NEIGHBORHOOD, EXCELLENT SCHOOLS, AND MANY RECRE-  
ATIONAL OPPORTUNITIES-OUR COMMUNITY PROVIDES AN IDEAL  
PLACE FOR YOU AND PLAY."  
THE QUALITIES THAT ARE VALUED IN THE HIGHLANDS ARE THE  
QUALITIES THAT WOULD SUPPORT THE DESIGN OF THE PRO-  
POSED SENIOR LIVING FACILITY.



FIGURE 26

## LAKE SAMMAMMISH + ISSAQUAH

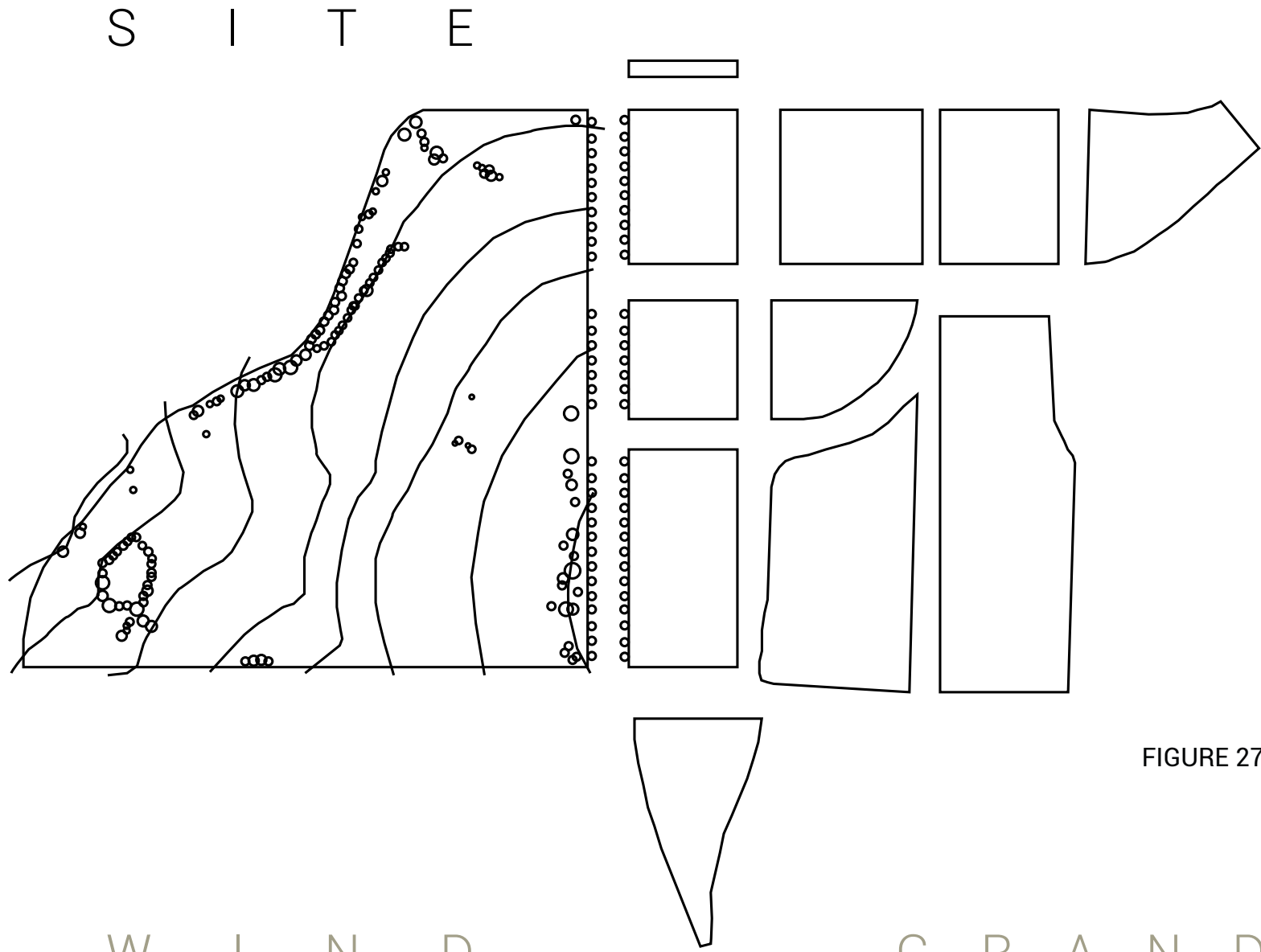


FIGURE 27

## WIND ROSE

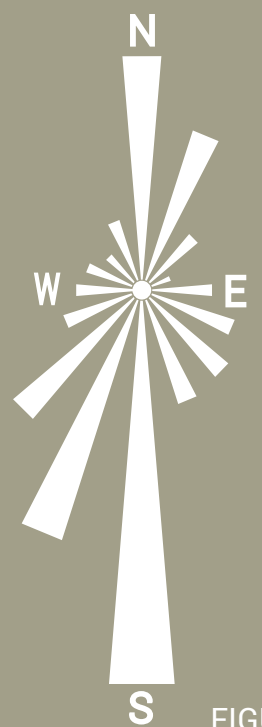


FIGURE 28

THE WIND IN THE PACIF-  
IC NORTHWEST REGION OF  
WASHINGTON COMES MAINLY  
FROM THE SOUTHWEST BE-  
CAUSE OF THE COASTAL WINDS  
COMING UP FORM THE SOUTH  
WHICH IS WHY THE TEMPERA-  
TURES ARE SO MILD FOR BE-  
ING IN THE NORTH. THEIR ARE  
ALSO WINDS THAT DO BLOW  
DOWN FROM THE NORTH THAT  
BRING IN THE COLD CLIMATES.  
WITH THESE WINDS SUSTAIN-  
ABLE STRATEGIES LIKE WIND  
HARVESTING FOR ENERGY  
PURPOSES ARE OPTIONS TO  
BE EXPLORED INTO FURTHER  
THROUGHOUT THIS THESIS.

## GRAND PLAZA

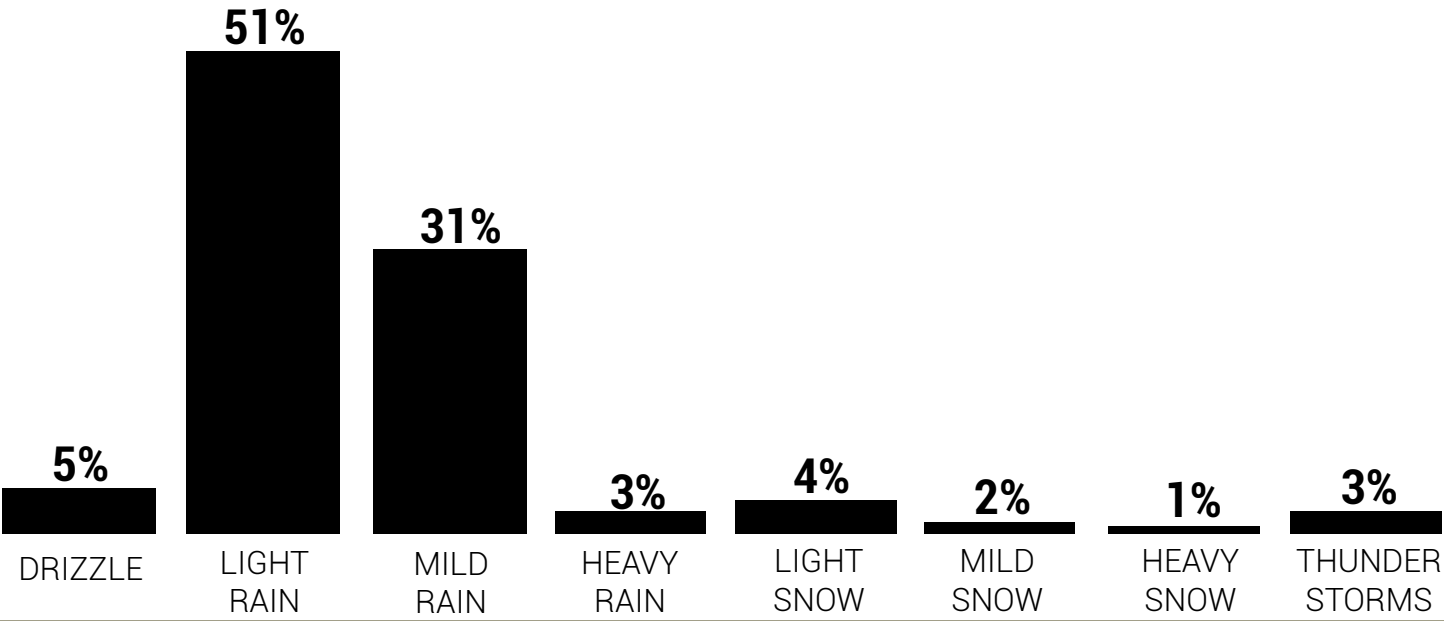
THE GRAND PLAZA OF THE IS-  
SAQUAH HIGHLANDS IS LOCAT-  
ED RIGHT ACROSS THE STREET  
FROM THE PROPOSED THESIS  
SITE, THIS PLAZA HAS CONVE-  
NIENCES THAT WILL SUPPORT  
THE DEMAND OF THE SENIOR  
LIVING FACILITY. TO CROSS  
THE STREET TO REACH THE  
GRAND PLAZA RESIDENTS AND  
VISITORS MUST CROSS A ONE-  
WAY STREET THAT PROVIDES  
PROPER AND SAFE PEDESTRI-  
AN CROSSWALKS.





FIGURE 29

# WEATHER PATTERNS



# S U N S T U D Y



FIGURE 30

AS IN ANY LOCATION THE TIMES THAT THE SUN RISE AND SET THROUGHOUT THE YEAR CHANGE DRASTICALLY. IN THE WESTERN WASHINGTON AREA SPECIFICALLY THE MOST DRASTIC TIME DIFFERENCE BETWEEN THE SUNSET IS 4 HOURS AND 51 MINUTES WHILE THE DIFFERENCE BETWEEN THE SUN RISE IS NOT AS DRASTIC WITH A DIFFERENCE OF 1 HOUR AND 43 MINUTES. THIS ALLOWS FOR A MAXIMUM OF 11 HOURS AND A MINIMUM OF 7 HOURS AND 25 MINUTES.

THE PACIFIC NORTHWEST IS KNOWING SPECIFICALLY FOR THEIR RAINY BUT MILD WEATHER PATTERNS THROUGHOUT THE ENTIRE YEAR. THIS ALLOWS FOR EXPLORATION INTO SUSTAINABLE STRATEGIES THAT RELY HEAVILY ON RAINWATER COLLECTION FOR THIS THESIS. THIS WILL MOST LIKELY BE THE MOST EXPLORED SUSTAINABLE STRATEGY SOLELY BECAUSE IT MAKES THE MOST SENSE FOR THIS CLIMATE. RAINWATER CAN BE HARVESTED AND USED FOR THE BENEFIT OF THE RESIDENTS.

FIGURE 31





FIGURE 32

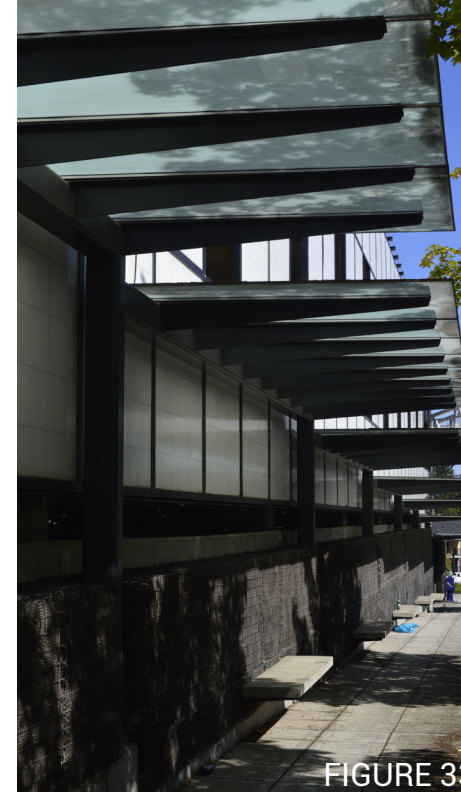


FIGURE 33



FIGURE 34



FIGURE 35



FIGURE 36



FIGURE 37

## SUSTAINABLE STRATEGIES

THE HIGHLANDS HAVE A SET OF SUSTAINABLE STANDARDS, THESE STANDARDS ARE FOUND WITHIN THE COMMUNITY IN ALL THE BUILDINGS ALREADY DESIGNED AND ARE REQUIRED FOR ANY FUTURE DEVELOPMENT IN THE CITY. THESE ARE THE BASE LINE OF SUSTAINABLE APPLICATIONS THAT MUST BE MET, BUT THERE IS OPPORTUNITIES TO APPLY FURTHER SUSTAINABLE STRATEGIES THAT ARE NOT INCLUDED IN THE SET STANDARDS.



# C O D E :

## C O D E A N A L Y S I S

IN KNOWING THE CODE INFORMATION IT ALLOWS FOR THE GROUNDWORK TO BE ROOTED IN THE THESIS, WITH THESE TOOLS THIS THESIS CAN THEN KNOW ITS LIMITS, REQUIREMENTS, AND NECESSITIES. THIS THESIS PROVIDES HOUSING FOR SENIORS WHICH RELIES HEAVILY ON SAFETY, WITH THIS IN MIND THE CODES ARE TAKEN EXTREMELY SERIOUSLY. THE CODE INFORMATION PROVIDE THE BASICS NEEDED TO DESIGN THIS THESIS.

CLASSIFICATION: RESIDENTIAL  
R-4

MINIMUM:  
CORRIDOR/AISLE WIDTH 36"  
EXIT DOORS 32"  
STAIR WIDTH 44"

CONSTRUCTION TYPE: PRO-  
TECTED WOOD FRAMING  
V-A

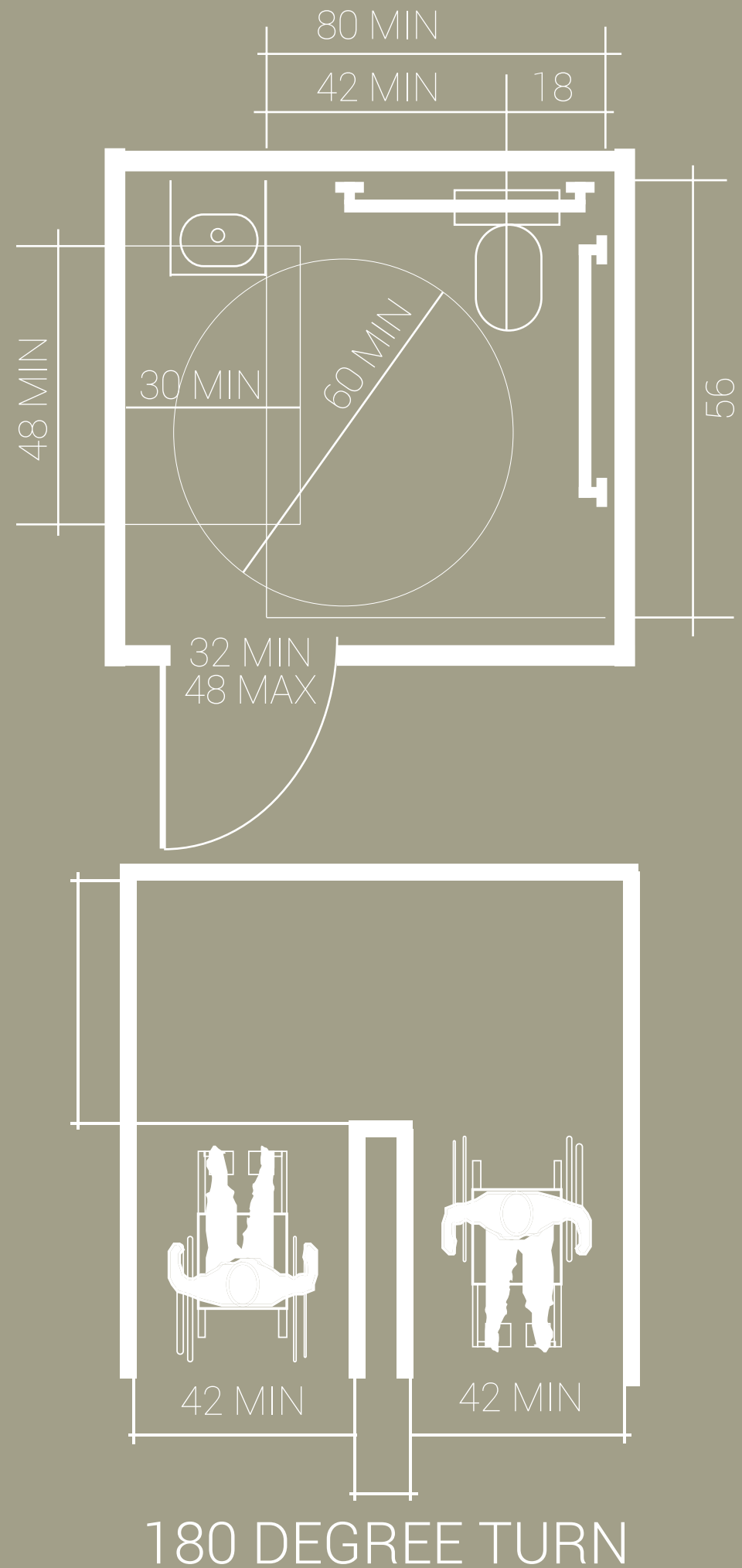
MAXIMUM TRAVEL DISTANCE  
TO EXIT 250 FEET

FIRE RATING RESISTANCE RE-  
QUIREMENTS:  
1 HOURS  
EXTERIOR WALLS  
STRUCTURAL FRAMING  
FLOOR/CEILING/ROOF

ALLOWABLE STORIES ABOVE  
GRADE

ALLOWABLE HEIGHT ABOVE  
GRADE

OCCUPANCY: 180





P L A N F O R  
P R O C E E D I N G :  
R E S E A R C H D I R E C T I O N  
THE RESEARCH OF THIS THESIS WILL BE CONDUCTED IN MULTIPLE AREAS, THIS WILL BE DONE THROUGHOUT THE PROJECTS DEVELOPMENT. THE RESEARCH WILL CONTINUE TO FOCUS ON THE KEY COMPONENTS OF THE THESIS INCLUDING PROJECT TYPOLOGY, SITE AND CLIMATE, PROGRAMMATIC REQUIREMENTS AND HEALTHY AGING METHODS, ETC. THE STUDY OF HOW SPACES CAN AFFECT PEOPLE AND THEIR PRODUCTIVITY WILL CONTINUE TO BE AN EMPHASIS IN RESEARCH.

D E S I G N  
M E T H O D O L O G Y

THE DESIGN METHODOLOGIES USED WILL BE A COMBINATION OF DESIGN RESEARCH AND DESCRIPTIVE RESEARCH COLLECTIVELY THESE METHODS WILL PROVIDE A DEEP UNDERSTANDING OF THE RESEARCH AND DESIGN INTENTIONS OF THIS THESIS.

D E S I G N  
R E S E A R C H

THIS METHOD WILL BE USED THROUGHOUT THE COMPLETION OF THE THESIS TO PROVIDE FURTHER UNDERSTANDING OF FORM AND FUNCTION. THROUGH EXPLORATION OF DESIGN AND REDESIGN IT WILL ALLOW FOR THE PIECES THAT WORK TO BE STRATEGICALLY PIECED TOGETHER WHILE ELIMINATING THE ELEMENTS THAT DO NOT ADD TO THE UNDERLYING IDEAS OF THIS THESIS. THIS TYPE OF STUDY WILL BE DONE THROUGH MEANS OF INVESTIGATING CONCEPTS, SKETCHES, MODELS, ETC. THE DESIGN RESEARCH METHODOLOGY IS NECESSARY IN THE FIELD OF ARCHITECTURE TO BE ABLE TO PRODUCE A VISUAL UNDERSTANDING OF THE CONCEPT THAT IS THEORIZED. THIS METHOD WILL PROVIDE A VISUAL UNDERSTANDING OF EACH PHASE OF THE PROCESS UNTIL THE FINAL DESIGN IS CONCEPTUALIZED. IN THE END THIS METHOD WILL ALLOW FOR COMPONENTS THAT DISPLAY A HIGHER AND MORE EDUCATED DESIGN TO MAKE UP THE THESIS COMPLETELY WHILE PRODUCING A DESIGN RESEARCH METHODOLOGY TYPE PROJECT.

D E S C R I P T I V E  
R E S E A R C H

DESCRIPTIVE RESEARCH INCLUDES QUANTITATIVE AND QUALITATIVE DATA BOTH TO BE USED AS SUPPORTING INFORMATION PERTAINING TO THE THESIS OBJECTIVE. THIS TYPE OF RESEARCH WILL ALLOW FOR A COLLECTION OF STATISTICAL AND SCIENTIFIC DATA ALONG WITH DIRECT OBSERVATION AND INTERVIEWS. THIS DATA WILL BE ANALYZED AND COLLECTIVELY ARCHIVED FOR CONTINUED USE AND REFERENCE THROUGHOUT THE DESIGN PROCESS. BY USING THIS METHOD OF RESEARCH IT WILL ALLOW FOR SPECIFIC TOPICS INCLUDING TYPOLOGY, CLIMATE ZONE, HEALTHY AGING, ETC. DOCUMENTATION OF THE DIRECT INFORMATION USED TO SUPPORT THIS THESIS WILL BE PROPERLY GIVEN CREDIT THROUGH MEANS OF CITATION THROUGHOUT THIS BOOK.

D O C U M E  
N T A T I O N  
O F D E S I G N

THE DOCUMENTATION OF THIS THESIS WILL BE AN ONGOING COMBINATION OF THE FOLLOWING METHODS: SKETCHES, TEXTS, PHOTOS, MODELS, COMPUTER BIM PROGRAMMING, ETC. A DIGITAL COPY OF THE COMPLETE SET OF DOCUMENTATIONS WILL BE AVAILABLE TO THE UNIVERSITY UPON COMPLETION OF THE PROJECT. ALONG WITH A DIGITAL COPY WILL BE A PHYSICAL DISPLAY INCLUDING A FINAL CONTEXT MODEL, A FINAL BUILDING MODEL, WITH PRESENTATION BOARDS DISPLAYING DESIRED RENDERINGS AND INFORMATION.

SCHEDULE

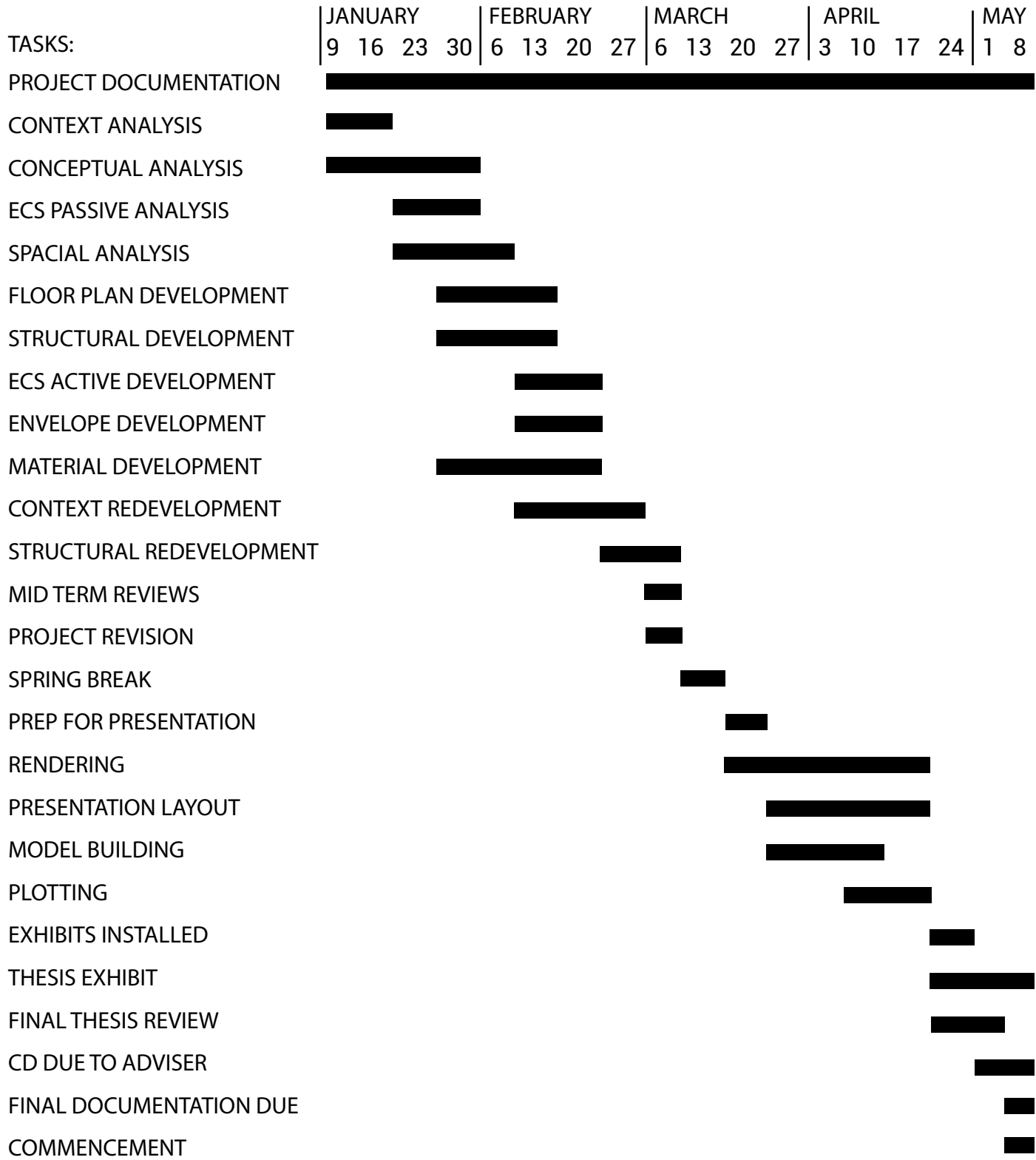


FIGURE 40

# T H S I S :

HOW CAN ARCHITECTURE  
ENGAGE AND ENCOURAGE  
SENIORS TO LEAD A HEALTHY  
AND POSITIVE LIFESTYLE?

G O A L :

TO ACTIVATE SENIORS MINDS AND BODIES TO  
MAINTAIN HEALTH AND HAPPINESS IN ORDER TO  
PREVENT DEGENERATION.

T Y P O L O G Y :

INDEPENDENT SENIOR LIVING COMMUNITY

J U S T I F I C A T I O N :

- DEMAND
- AFFECTS MOST PEOPLE
- NEED FOR REDEFINITION
- IMPROVE THE STIGMA
- SITE RELAVENT

# I S S A Q U A H H I G H L A N D S

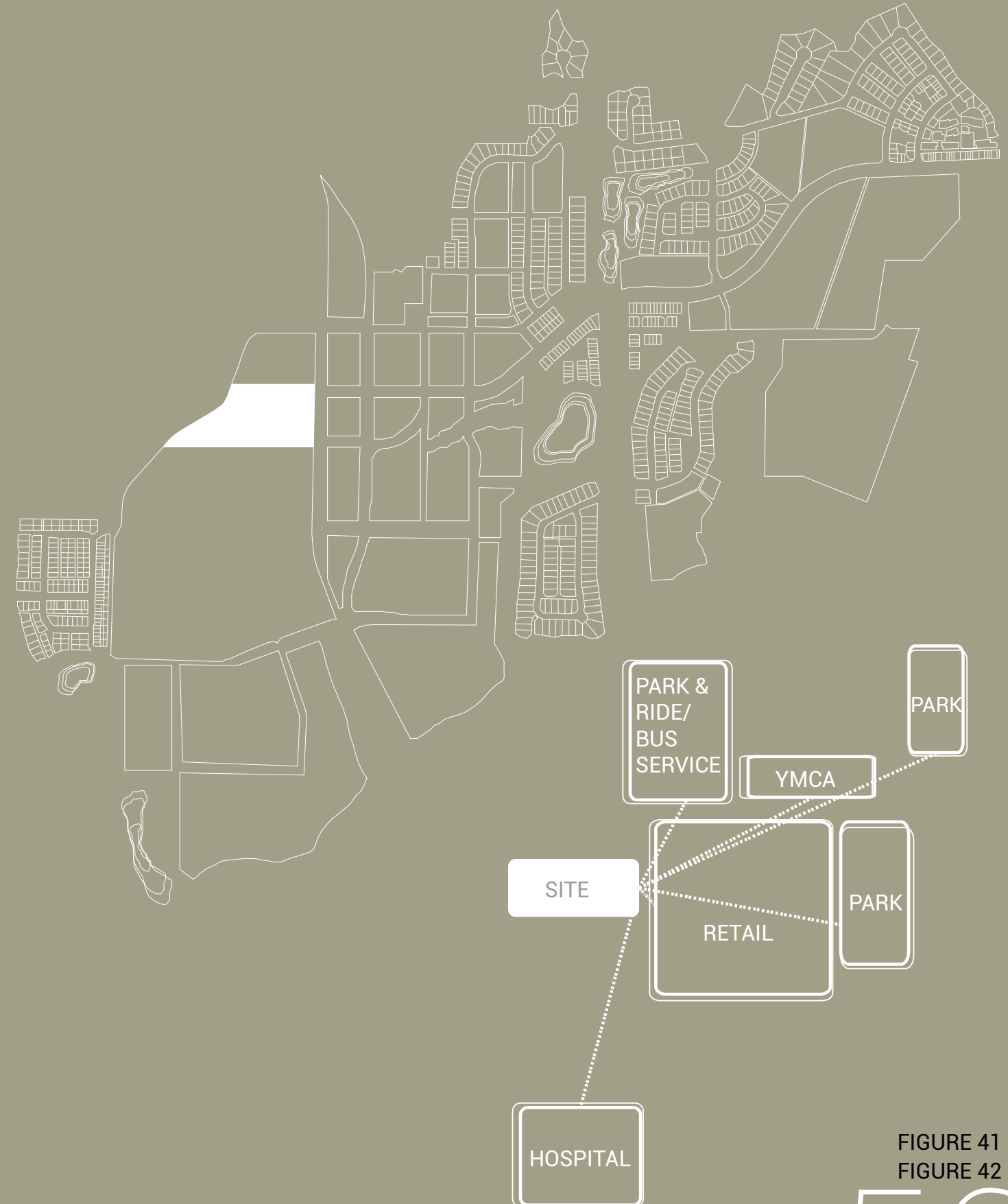


FIGURE 41  
FIGURE 42





EAST  
SOUTHEAST



SOUTH  
SOUTHWEST







WEST



NORTHWEST



NORTH



# R E S E A R C H

WHAT ARE THE NEEDS  
THAT MUST BE MET TO  
ALLOW FOR SENIORS  
TO MAINTAIN THEIR  
HEALTH AND HAPPINESS?





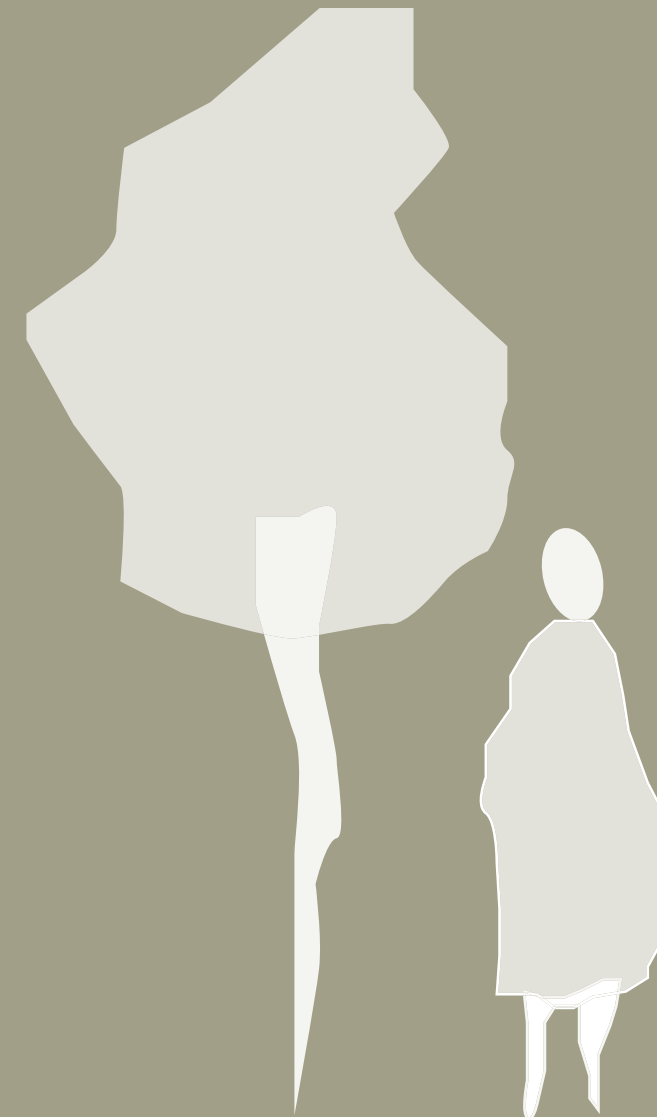
SENSE OF PURPOSE



SENSE OF INDEPENDENCE



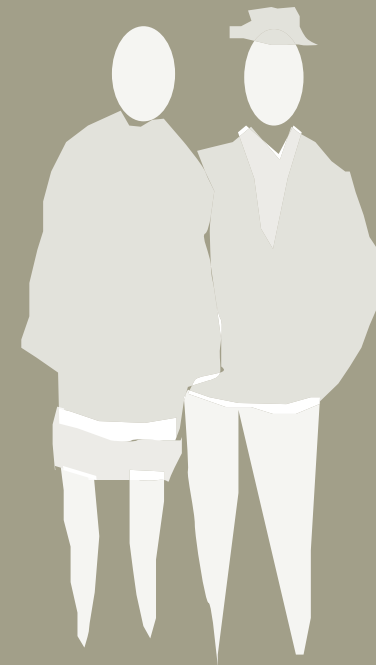
PHYSICAL PARTICIPATION



CONNECTION TO NATURE



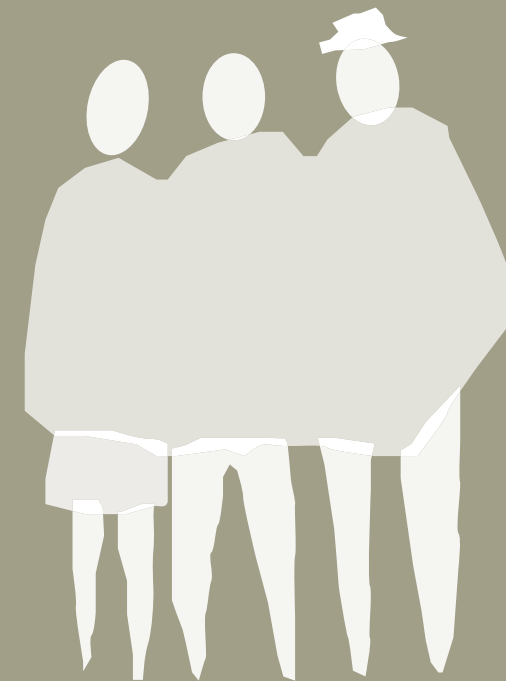
G O A L S



SENSE OF BELONGING



NEW EXPERIENCES  
AND KNOWLEDGE



SOCIAL NETWORK

P  
PROGRAMMING

RECEPTION  
PRIVATE ROOMS  
OFFICES  
WORK STATIONS  
BREAK ROOM  
NURSES STATIONS  
RESTROOMS  
DAYCARE  
MEDIA CENTER  
WORSHIP ROOM  
SALON  
REC ROOM  
CONVENIENCE STORE  
GREENHOUSE  
CHANGING ROOMS  
STEAM ROOM  
SAUNA  
YOGA STUDIO  
SENIOR LIVING SUITES  
ASSISTED LIVING  
SUITES  
COMMON ROOM  
DINING  
KITCHEN  
MECHANICAL  
STORAGE

RECEPTION  
~~PRIVATE ROOMS~~  
OFFICES  
WORK STATIONS  
BREAK ROOM  
~~NURSES STATIONS~~  
RESTROOMS  
DAYCARE  
MEDIA CENTER  
~~WORSHIP ROOM~~  
SALON  
REC ROOM  
~~CONVENIENCE STORE~~  
GREENHOUSE  
CHANGING ROOMS  
STEAM ROOM  
SAUNA  
YOGA STUDIO  
SENIOR LIVING SUITES  
~~ASSISTED LIVING~~  
SUITES  
COMMON ROOM  
DINING  
KITCHEN  
MECHANICAL  
STORAGE

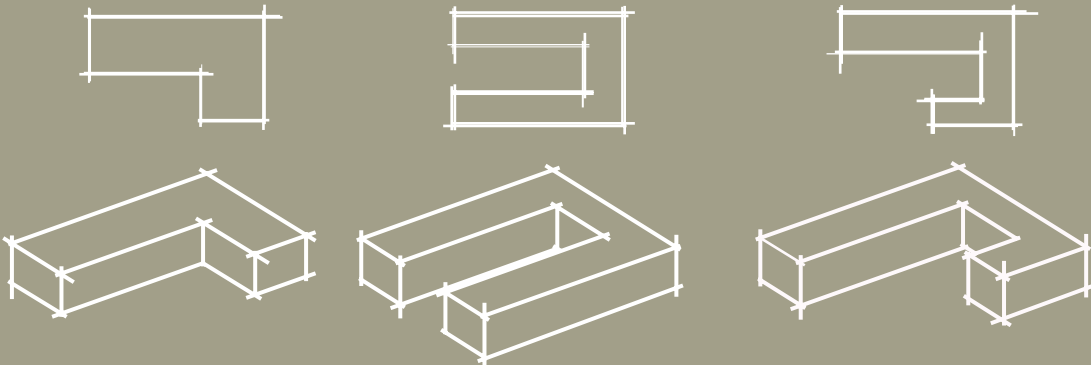
+

STORAGE UNITS  
WOODSHOP  
AROBIC STUDIO  
CARDIO ZONE  
LOUNGING NOOKS  
CLUBHOUSE  
THEATER  
CAFE  
SENSORY GARDEN  
COMMUNITY GARDEN  
OUTDOOR CLASS  
FIREPIT  
PLAYGROUND  
MULTI-USE ROOM

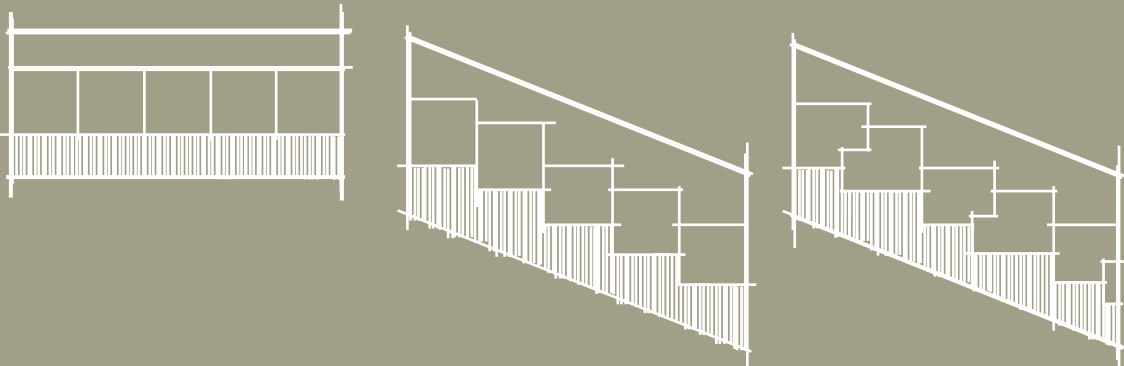


P  
ROCESS

F O R M



R E S I D E N T I A L U N I T S



L A N D S C A P E

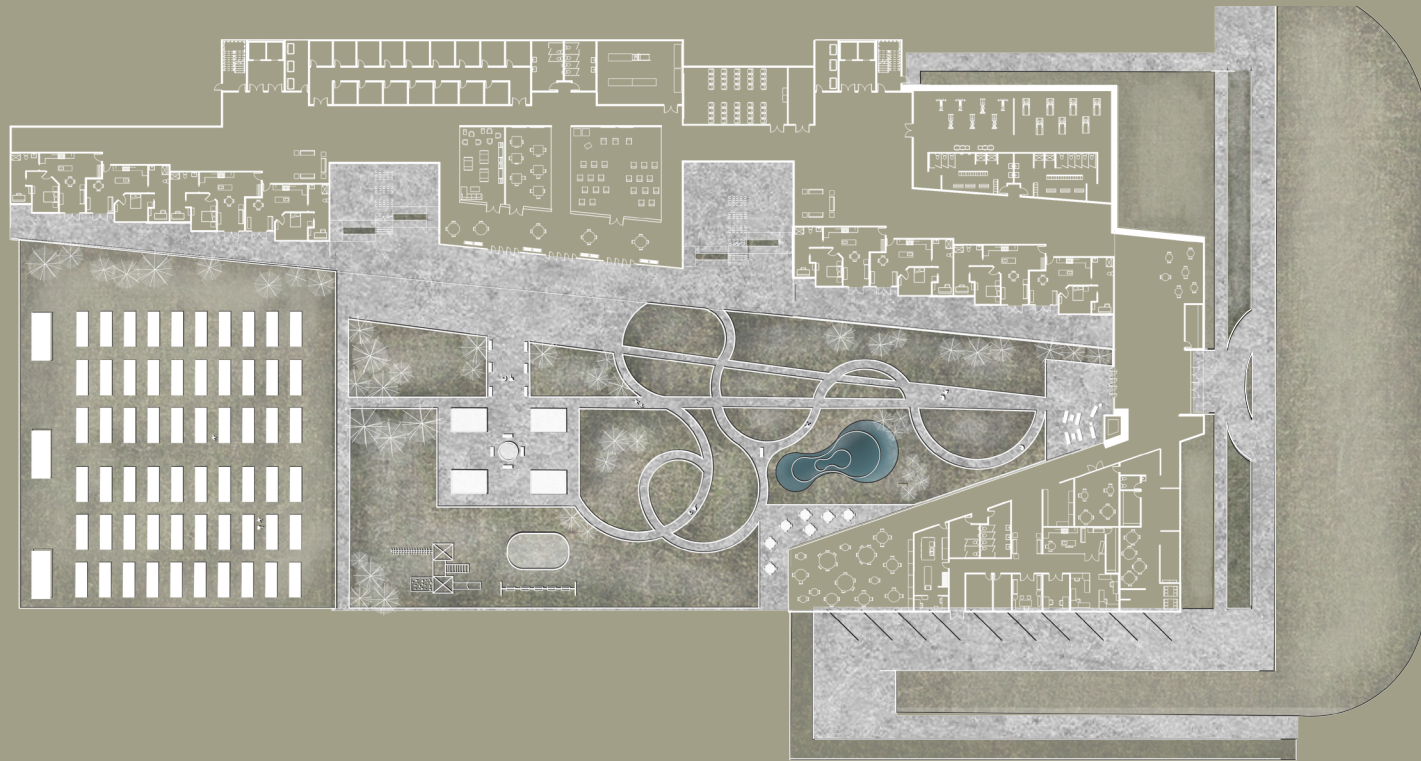


PUBLIC — PRIVATE EXPERIENCE

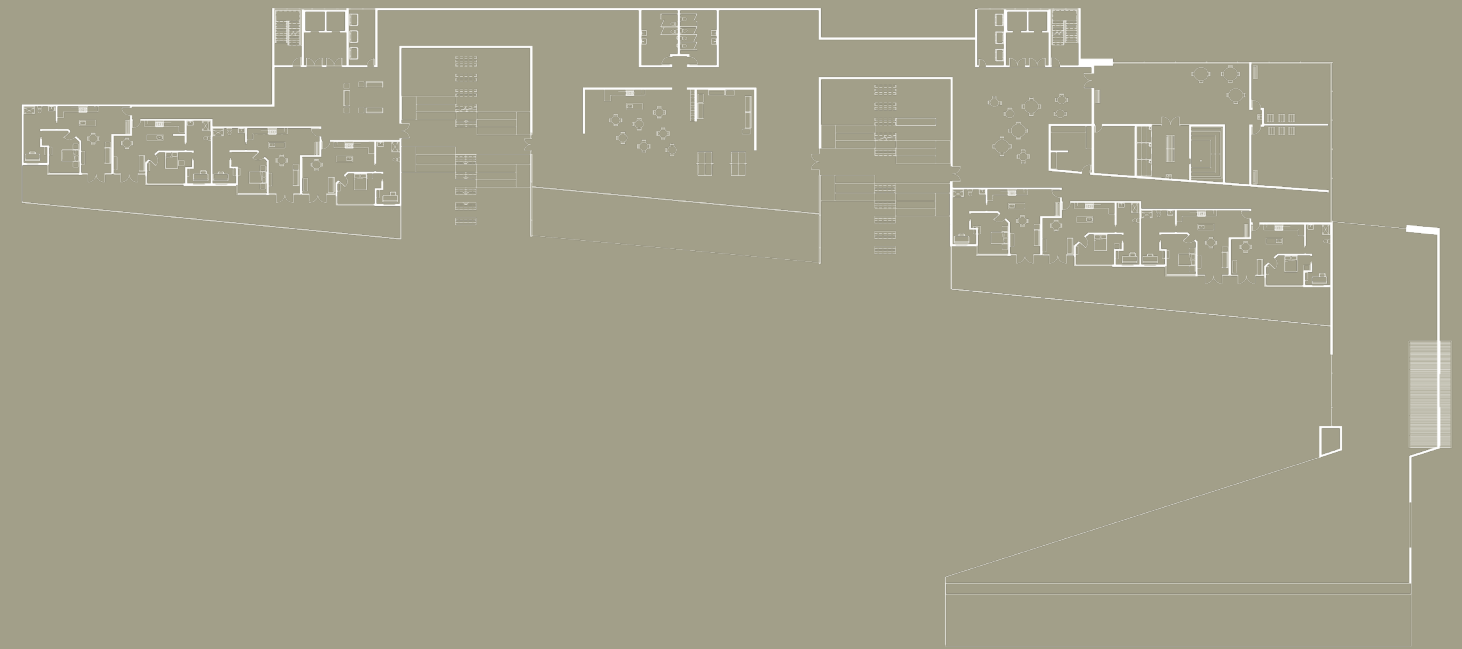
COMMUNITY SPACE  
MULTI-USE/PURPOSE SPACE  
INTIMATE SPACE

D E S I G N

S I T E P L A N + F I R S T F L O O R



S E C O N D F L O O R



T H I R D F L O O R





G R E E N R A M P

D E C K S P A C E



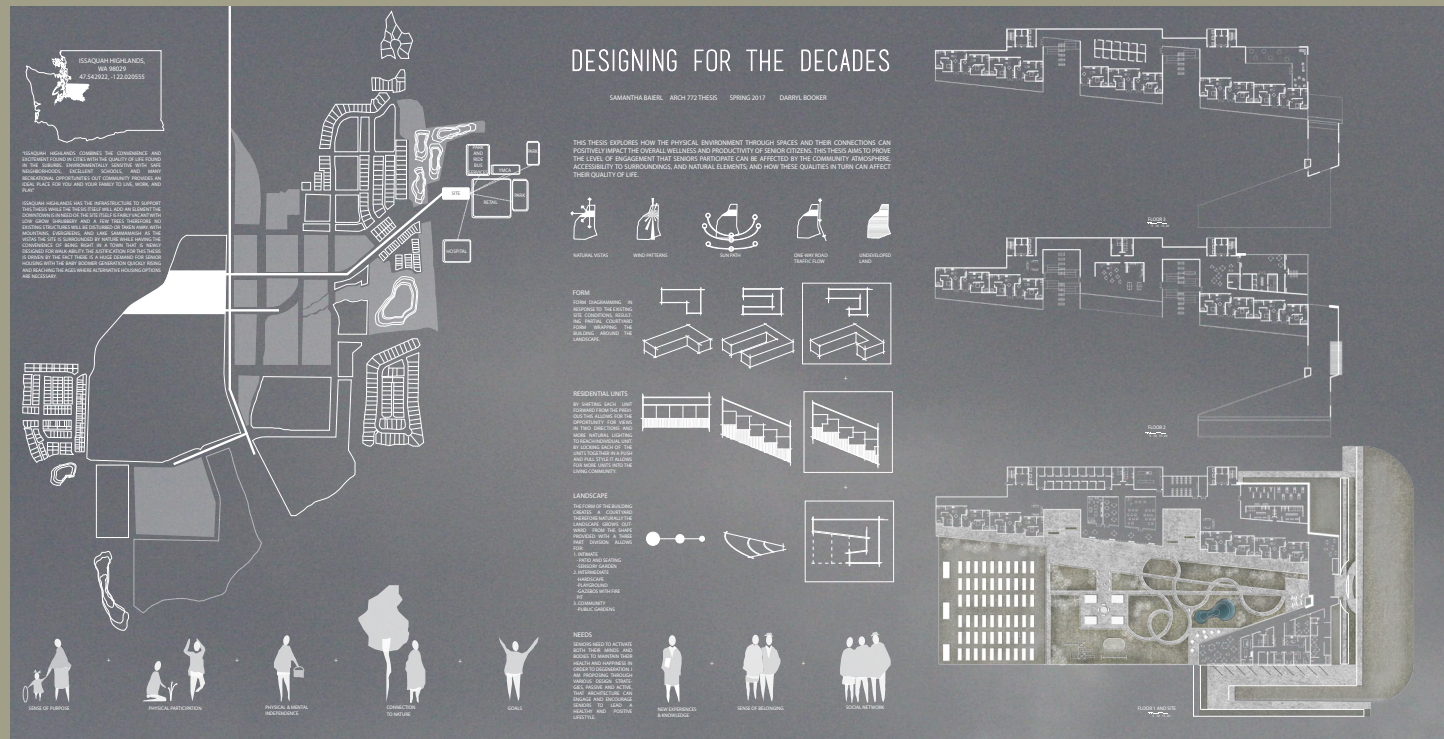


G R E E N   W A L L

E N T R Y   A P P R O A C H











S A M A N T H A B A I E R L

CONTACT INFORMATION

PHONE: 715.781.6306

EMAIL: SAMANTHA.BAIERL@NDSU.EDU

I HAVE ALWAYS HELD AN INTEREST IN ARCHITECTURE, SINCE I WAS YOUNG I CONSISTENTLY LOOKED UP WHEN WALKING INTO A BUILDING TO SEE WHAT IT IS ALL ABOUT. GROWING UP I WAS ALSO FAIRLY ARTISTIC, AND HAD AN APPRECIATION FOR THE BEAUTY THAT CAN BE CREATED AND EXPLORED. THEREFORE, I PUT TO OF MY DEEP INTERESTS TOGETHER AND CHOOSING ARCHITECTURE FOR A MAJOR WAS A NO BRAINIER. THROUGHOUT MY COLLEGE CAREER I LEARNED ABOUT ARCHITECTURE AND MORE. THIS PROGRAM CHALLENGED ME IN MY DESIGN ABILITIES AND TIME MANAGEMENT, TWO THINGS I WILL TAKE WITH ME THROUGHOUT MY DESIGN CA-

REER.



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