

City of High Point

*Municipal Office Building
211 S. Hamilton Street
High Point, NC 27260*



Meeting Agenda

Wednesday, October 9, 2019

9:00 AM

3rd Floor Conference Room

Prosperity and Livability Committee

Prosperity and Livability Committee - Council Member Jason Ewing, Chair[2019-462](#)

Presentation-Proposed "Sensory" Garden at the Library
Staff will present a presentation on a Proposed "Sensory" Garden at the Library

Attachments: [3. Sensory Garden - Concept Design Presentation.pdf](#)

[4. Sensory Garden - INFO Booklet- Concept Proposal.pdf](#)

[Sensory Garden - Concept Design Presentation.pptx](#)

[2019-463](#)

Presentation-Proposed Cassell Street Greenway
Staff will present a Proposed Cassell Street Greenway

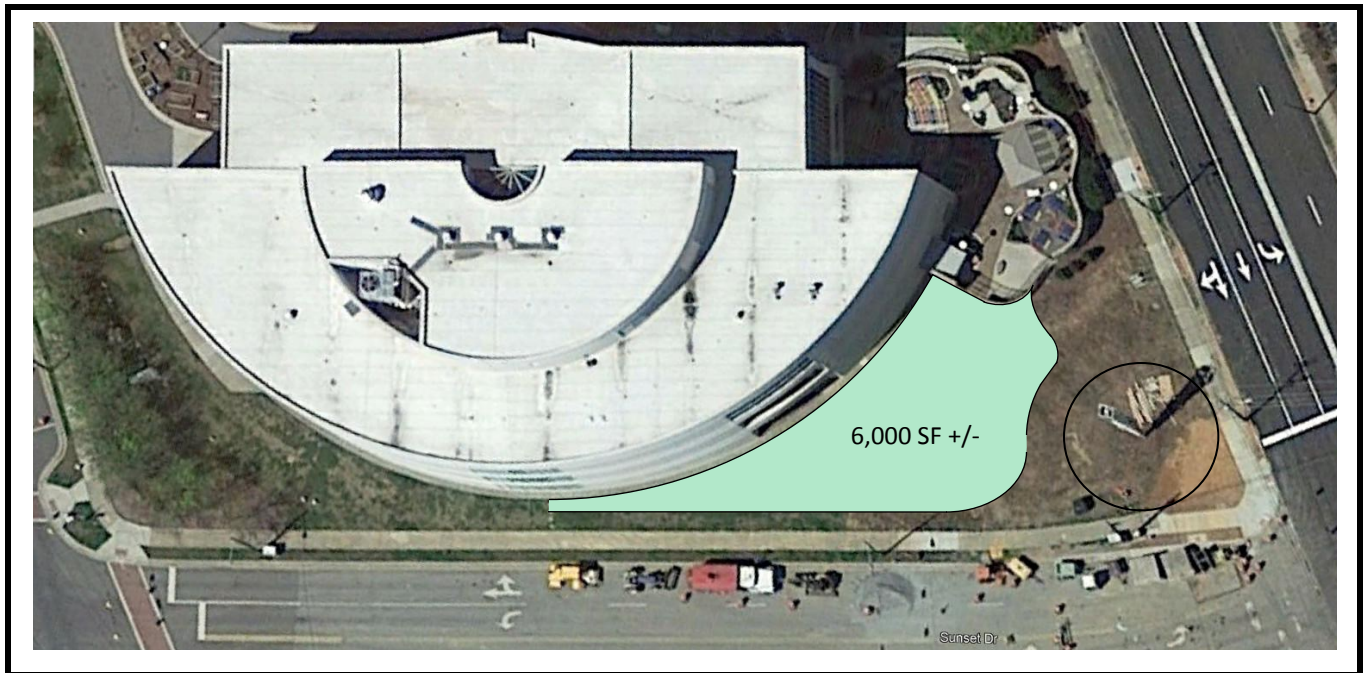
Attachments: [SOUTHWEST GREENWAY PRESENTATION.pptx](#)

ADJOURNMENT

SENSORY GARDEN CONCEPT PROPOSAL

FOR

HIGH POINT, NORTH CAROLINA (PUBLIC LIBRARY)



PROPOSAL PREPARED BY:

Raymond Gibbs, PLA, ASLA

Executive Director

Forward High Point Inc.



JULY 12, 2018



WHAT IS A SENSORY GARDEN

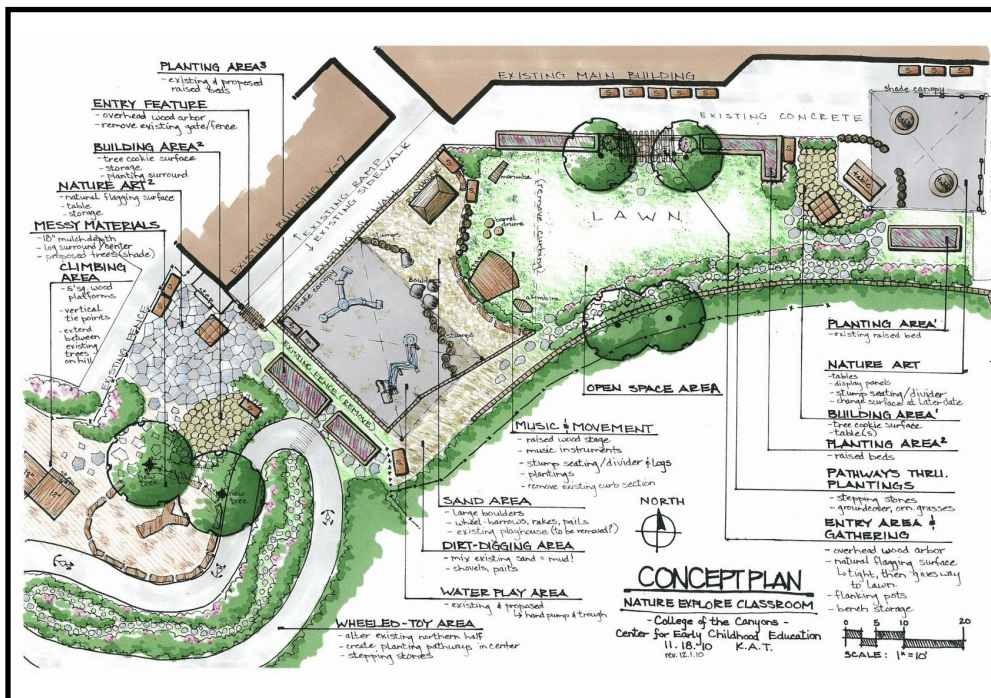
A **Sensory Garden** is a self-contained garden area that allows visitors to enjoy a wide variety of sensory experiences. Sensory gardens are designed to provide opportunities to stimulate the senses, both individually and in combination, in ways that users may not usually encounter.

Sensory gardens have a wide range of educational and recreational applications. They can be used in the education of special needs students, including people with autism. As a form of horticultural therapy, they may be helpful in the care of people with dementia.



Sensory gardens can be designed in such a way as to be accessible and enjoyable for both disabled and non-disabled users. A sensory garden, for example, may contain features accessible to the disabled individual such as: scented and edible plants, sculptures and sculpted handrails, water features designed to make sound and play over the hands, textured touch-pads, magnifying-glass screens, braille and audio induction loop descriptions. Depending on the user group, other provisions may integrate sound and music more centrally to combine the play needs of younger users with their sensory needs.

Many sensory gardens devote themselves to providing experience for multiple senses; those specializing in scent are sometimes called scented gardens, those specializing in music/sound are sound gardens where the equipment doubles up to provides an enhanced opportunity for strategic developmental, learning and educational outcomes.



Sensory Gardens usually have an enhanced infrastructure to permit wheelchair access and meet other accessibility concerns; the design and layout provides a stimulating journey through the senses, heightening awareness, and bringing positive learning experiences.

— Definition: Wikipedia

EXAMPLE OF SENSORY GARDEN DESIGN: College of the Canyons; Center for Early Childhood Education

CREDITS: The following Text come from a publication (ENH981) by the IFAS Extension of University of Florida. Authored by Eva C. Worden and Kimberly A. Moore. Photos are from Google Images.

OVERVIEW

Gardens are designed to stimulate the senses. Some gardens stimulate the senses to a greater degree than others. In sensory gardens, plants and other design elements are selected with the intention of providing experiences for heightened sight, smell, hearing, touch, and taste.

Some sensory gardens are devoted specifically to one sense, such as a fragrance garden. Others may focus on several senses, with separate sections devoted to each sense. A third approach is a blend that addresses all of the senses.

DESIGNING THE SENSORY GARDEN

Well-designed sensory gardens can be simultaneously stimulating and relaxing. They can be created in spaces that are small or large, private or public.

Sensory gardens can serve many functions such as teaching, socializing, healing, and horticultural therapy.

The ill or weakened can be enlivened and renewed physically, mentally, or spiritually by sensory gardens. Individuals with impairment of one or more of their five senses may find special enjoyment because they may have enhanced perception in their other senses. When designing gardens for individuals with special needs, they should be consulted to ensure their specific needs are met.



Gardens with a variety of sensory elements are particularly effective in association with health care facilities such as nursing homes and hospitals, as well as schools, parks, and botanic gardens. The audiences and objectives for every sensory garden may vary; however, a number of design considerations are common to all.

HARDSCAPE ELEMENTS

Hardscape elements are the components of the landscape not composed of living plants—paths, benches, arbors, walls, etc. Paving materials for garden paths can vary throughout the garden, to provide desirable challenges for wheelchair users. Block paving, timber decking, mulch, and stone are some options, but may become slippery when wet. Pathway width should be a minimum of 36 inches, with an ideal of 60 inches for wheelchair access. No more than 30% of the total trail length may exceed a running slope of 8.33%. Wherever possible, trails should be designed on more level terrain to maintain minimum design guidelines for grade and avoid the need for switchbacks.

Raised planting beds can provide easy access to plants for all garden users, and are especially helpful to the vision impaired and wheelchair users. Beds placed at lower heights that are comfortable for children will encourage them to explore the plantings.



Seating in the sensory garden should be placed strategically for functionality and to maximize enjoyment of the space. Seating can be an opportunity for sensory experience.

Consider the options, from grouping a circle of large, rough-textured tree stumps, to placing a smooth metal bench that becomes warm or cool depending on the position of the sun. Seating with pergolas and gazebos also can incorporate fragrant plants.



Signage is a key element of a sensory garden. Visitors will be more inclined to interact with plants if they are prompted by clear labeling. One approach is to use color coded signage that highlights the different senses associated with each plant. Braille plant labels placed at accessible locations, such as the back face of a handrail, are typically used in gardens for the visually-impaired. A recorded audio system can provide information to the visually-impaired who do not read Braille. A sensory garden brochure with photographs and a plant list can serve as a guide during the garden visit, and as a take-home educational piece.

PLANT SELECTION

As in designing any garden, plants should be selected that will thrive in the environment particular to each garden. An objective in sensory garden design is to encourage users to interact with the plants, often directly, by breaking off leaves to smell or taste. Therefore, avoid plants that are poisonous, allergenic, or are likely to require pesticide applications.



Some plant species can serve multiple roles in a sensory garden. For example, mints provide both scent and taste opportunities.

Plantings arranged in themed designs can engage garden users and elicit memorable experiences. Popular themes include plants from different regions of the world or cultures, moonlight gardens, and medicinal plants.

Sight

Color, visual texture, form, movement, light, and shadow stimulate the sense of sight. Contrasts of these elements add to the sensory experience.



Color provides a visual stimulus while adding order and balance, unity, rhythm, focal points, accents, and definition to a garden. Warm colors, such as red, orange, and yellow tend to promote activity while cool colors, such as blue, purple, and white, tend to be soothing and promote tranquility. Flowers are a traditional, effective way to add color. Colorful fruits, foliage, and bark also can significantly enhance a garden's visual appeal.

Partially sighted persons, however, may be able to perceive large blocks of color. This factor may be considered in the design of some hardscape components and planting beds.



Plants with interesting visual texture add to the sensory garden experience. Excellent additions for sensory gardens include smooth, rough, ruffled, fuzzy, or lacey-textured plants. The overall texture of a plant is another consideration. For example, a fine-textured plant has small leaves and a somewhat sparse appearance, while a coarse-textured plant has large leaves and a fuller appearance.

Plants come in many forms, including upright, open, weeping, cascading, or columnar. Individual parts of plants, such as leaves or fruit, have their own forms, such as round, toothed, and spherical.

Movement can be added to the garden in a number of ways. Some examples include plants that sway in the wind, moving water features, pools with floating leaves or flowers, fish in ponds, butterflies, and birds. A sensation of movement can be achieved by designing planting beds so that the eye is drawn through a sequence of focal points and vistas.



Light and shadow are often overlooked but are visually important sensory garden elements, especially when held in contrast. Possibilities for contrast range from subtle, such as dappled sunlight through a shade tree, to dramatic, such as a dark tunnel of willow or vines that leads to an area of full sun.

Accessories for enhancing visual pleasure include color flood lights, torches, mirrors, and gazing globes. Mobiles and sculptures can add visual stimuli.

Sound



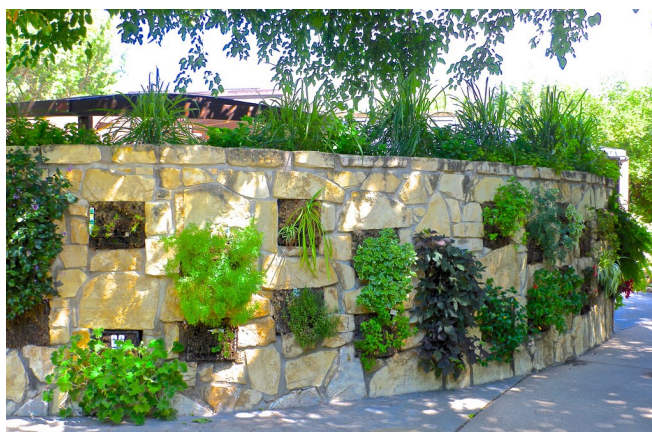
Opening the ears in a garden expands the senses and broadens the garden encounter. Opportunities can be provided in a sensory garden for sitting under a tree to hear the sound of wind rushing through the leaves. Many plants offer sounds with a small amount of wind or jostling: bamboo stems knock together, grasses rustle, palm fronds sway. Seed pods of some plants make natural maracas, or rattles. Leaves can be left on the ground to crunch underfoot.

Sounds of animals enliven the senses. Oak trees can host squirrels that chatter and scramble. Birdsongs can fill the garden if bird baths, bird-attracting plants, bird feeders, and bird houses are provided and maintained.

Accessories for bringing sounds to the garden include waterfalls, fountains, water harps, wind chimes, and music piped in through outdoor speakers.



Smell



The sense of smell is deeply emotional and associative. Scent in the garden can create a lasting sensory experience.

This can be especially meaningful for the visually impaired. A fragrance can evoke long-buried memories. Crushing and smelling a plant part is also a classic method of plant recognition and identification.

With thoughtful planning and design, it is not difficult to incorporate into a garden the fragrances of delicate nasturtium blossoms, the

heady perfume of gardenia, or the resinous scent of pine needles. Many edible species also have strong fragrance, such as tomatoes, citrus, and herbs and spices.

Some plants release their fragrance into the air with the heat of the sun, while others release their scent only when crushed. If the garden will be used in the evening, include plants that release their fragrance at night, such as confederate jasmine.

Place fragrant plants near garden seating to create a natural combination. Relaxing with a variety of scented plants

at hand to enjoy is a simple pleasure. Plants in large pots placed along the garden paths can be brushed and touched without stooping. When fragrant creeping herbs, such as thyme, are planted among pathways, walking or wheeling on them will release their aroma.



The timing of garden maintenance activities should be considered for their effect on scents in the air. For example, the smell of lawn mower exhaust is unappealing to most, but the fragrance of freshly cut grass is pleasing to many people. Mowing turf areas shortly before garden users arrive would address this issue.

Incense and scented oils in garden torches are among the accessories that contribute scent to the sensory garden.

Touch

In a sensory garden, people should be encouraged to touch plants. Plants should be chosen that are durable enough to withstand frequent brushing or handling.



Tactile delights can be found in soft flowers, fuzzy leaves, springy moss, rough bark, succulent leaves, and prickly seed pods. Even sticky fruit and gooey plant saps can stimulate the sense of touch and give children an educational thrill.

Some species offer a variety of textures within a single plant. A classic example is the rose, with its delicate petals and thorny stems. Others include silver buttonwood, with its rough bark and soft grey leaves, or southern magnolia, with its leaves slick, shiny, and dark green above, and soft, felted brown beneath.



Plants that may be dangerous to the visually impaired, such as spiny agaves or roses, need not be excluded from the sensory garden. Design can accommodate these plants by placing them out of accidental reach, toward the back of planting beds.

An excellent addition to a touch garden is a lawn where people can lie down. Water features within reach, with water lilies and other aquatic plants to touch, also provide tactile experiences.

Garden accessories that stimulate the sense of touch include outdoor misting machines and sculptures.

Taste

In a sensory garden, the taste buds can tingle from edible fruits, vegetables, herbs, and spices.



To ensure that everyone gets a taste, include plants that can produce a large number of edible parts over time, such as mint leaves, strawberries, or edible flowers, rather than species with more limited production, such as cantaloupe.

Including plants that can be tasted in the sensory garden provides teaching opportunities in edible landscaping, agriculture, and nutrition. It also is an excellent way to share memories and evoke cultural exchange over food plants.

Providing space for food preparation, cooking, and eating brings taste directly to the garden. This can be accomplished simply with an outdoor barbeque grill and a picnic table in the shade. A small pavilion for preparing herbal tea from the garden is also a wonderful addition.

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Water

Water is a basic of life. It is also an important element in the development of our human senses. Therefore it has been a prominent part of parks, open space and community design since the beginning of time.

Water features can be found in many types of types, forms and sizes. How they are utilized within a sensory garden can also take on multiple applications. Water also has a major impact on the

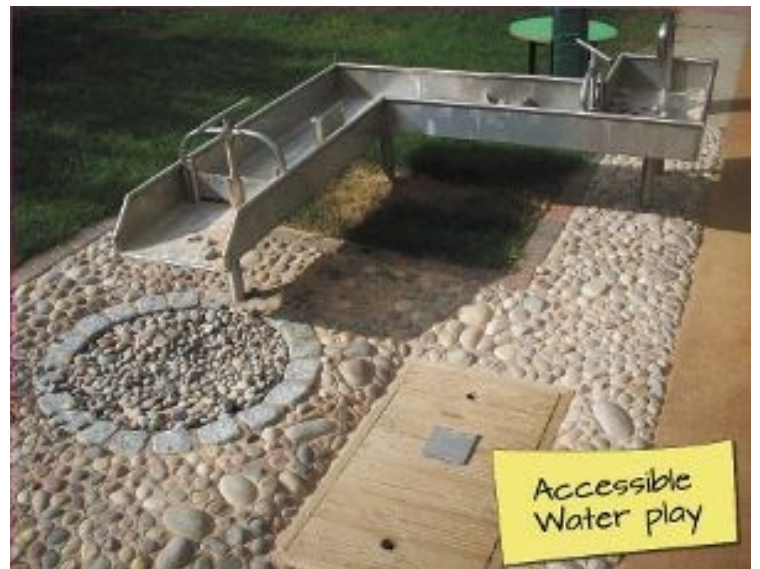
micro climate of an area as well. Water was also an early form of mechanical power and is still used today for that purpose.

Within a sensory garden, we may see water utilized for sound, movement, texture, energy, feel and as an education component for its vital like to all living things. From running water, to bubblers, ponds, waterfalls and water-wheels, the number of uses of water are almost limitless.





WATER ELEMENTS IN SENSORY GARDENS



Sensory Development of Autism Sufferers.

Autism is a developmental disability that impairs social interaction, communication, and behavior. Sufferers find it hard to understand the emotions of others, and often have delayed language development. It is common for individuals with autism to suffer from a variety of cognitive, learning, emotional, and behavior problems. There is no cure for autism, but speech and language therapy, occupational therapy, educational support, and a number of autism interventions are available to help sufferers and improve their way of life.

- www.experia-innovations.co.uk (Author: Saf Shaikh)

Therapeutic Landscapes For The Elderly

Therapeutic gardens and healing landscapes can be used to soothe or to stimulate. Sensory gardens are designed to stimulate, where plants with different scents, colors and textures are carefully chosen and planted in various patterns and designs.



Alzheimer's patients who are no longer able to communicate or express themselves respond in startlingly positive ways to spending time in a sensory garden, designed to stimulate the senses with different scents, sounds, colors and textures. Aromatic flowers and herbs, variously textured surfaces, ever-green shrubs and flowering plants in different colors and shades all play their part in awakening sensory awareness. Sound is also incorporated into a sensory garden through rustling leaves, running water, and structures built to attract wild birds.

Some sensory gardens include the sense of taste, by planting edible herbs, miniature fruit trees, and vegetables that can be picked and eaten.

Soothing, healing gardens can be found in more and more hospitals, as they respond to evidence that patients heal faster and are in a more positive frame of mind if their rooms look out onto greenery or if there are plants in their room. Using evidence-based design, hospitals and hospices create gardens that support and soothe patients. These oases of greenery are carefully laid out to be calming and relaxing, providing an important natural environment for patients and visiting relatives to recharge.



For elderly victims of Alzheimer's disease and other forms of dementia, horticultural therapy can be a vital way of defending against further memory loss. It's amazing to see the memories that are brought back just by being in a garden. The sight of a tree blowing in the wind, the sound of tinkling water, the smell of herbs in the hot sun - all of these are powerful memory triggers. People who bring their loved one to a memory sensory garden are often astonished by the recollections that their relative comes up with. The sights, sounds and smells of nature do not change much over time. There is

a deep-seated familiarity to them, which is calming to the dementia patient who feels as though nothing can be relied on to stay the same.

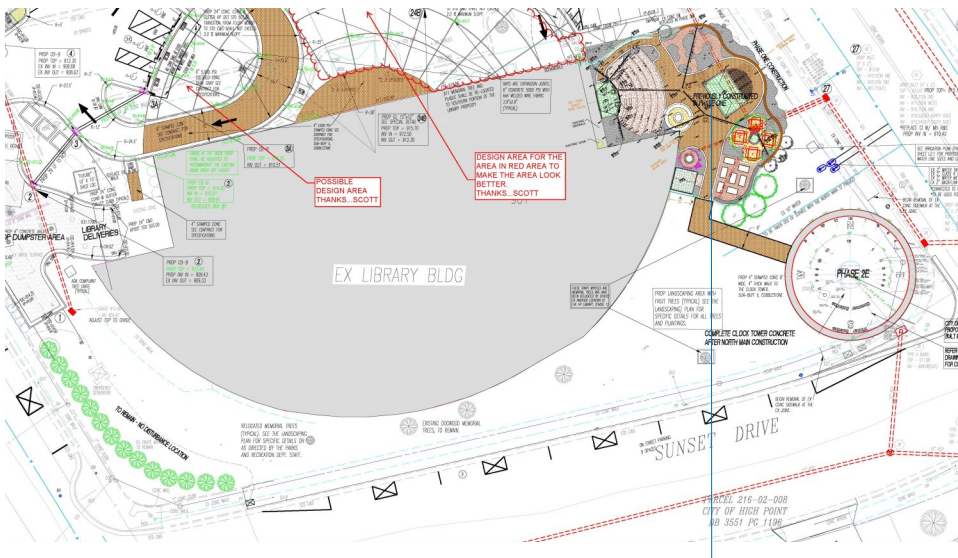
- www.Greeninfuture.com

PROPOSED SENSORY GARDEN FOR THE HIGH POINT LIBRARY

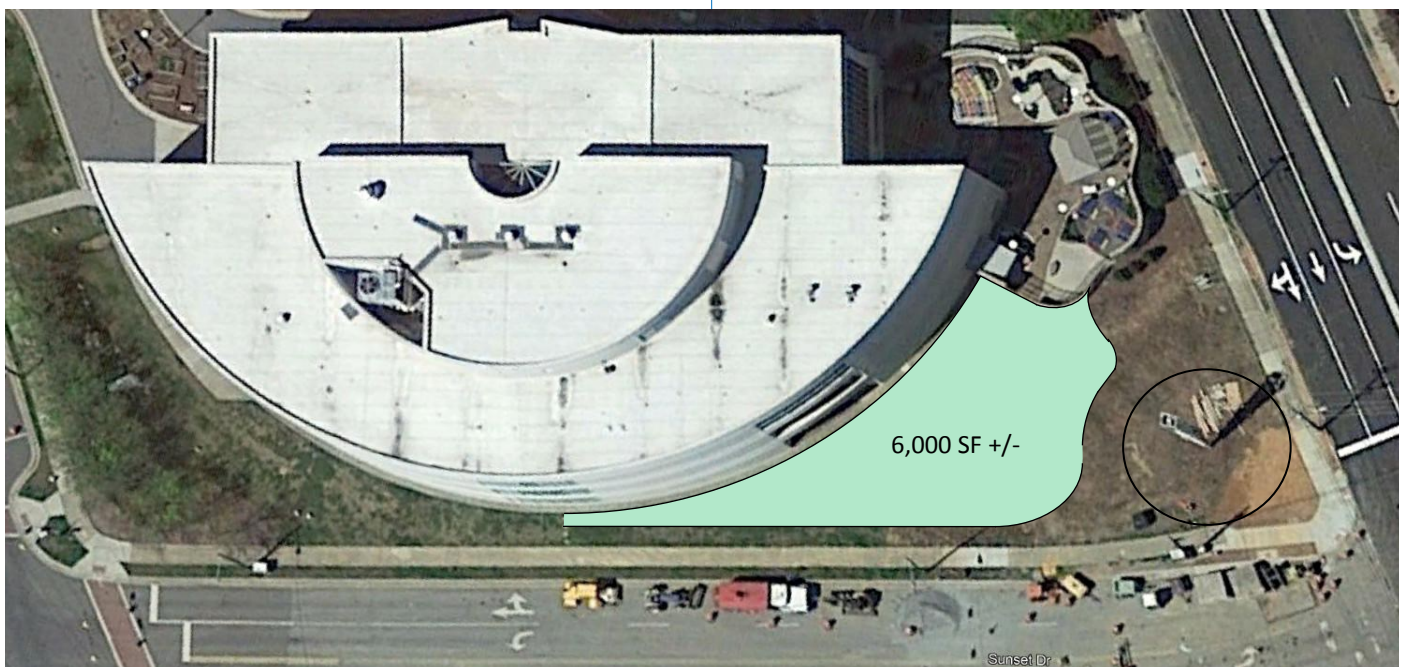
The High Point Public Library is proposing the idea of a Sensory Garden to be constructed on the South-East Corner of the Library block, at the corner of Main Street and Sunset Drive. This garden would provide a teaching and therapeutic area for the Library and the community as a whole. The area would be an area of sensory learning or an experiential garden space. Its purpose is to learn or relearn as well as to reflect and relax. This garden could be utilized by the community as a whole, but would most likely be utilized by children, both with and without disabilities, as well as the elderly.

SITE

The proposed site for the Sensory Garden is on the southeast corner of the library site—adjacent to the Children outdoor theatre area. This area is currently a grass area with a few newly planted trees. The primary feature of this area, outside of the children's outdoor area, is the Clock Pole, whose base seating area is yet to be completed.



The area envisioned for the Sensory Garden is approximately 6,000 SF and extends from the Building to the property line (approximately 15' off of the curb line). This area would extend from the wall of the children's area to the center line of the building.



DESIGN PROCESS

The High Point Library will work with Forward High Point's Executive Director, Ray Gibbs (who is a North Carolina Registered Landscape Architect) to develop both the Concept Plan and Site Plan for the proposed Sensory Garden. Mr. Gibbs, will work with the Library Staff and City Officials, as well as potential project sponsors and various interested citizens (Project Steering Committee) on the design and element program for the garden. Using input from these various user groups, Mr. Gibbs will generate a preliminary concept plan for review and comment. Following these comments, Mr. Gibbs will modify the plan as appropriate for additional review and comments.

A full Site Development Plan will be then prepared for presentation and public comments. The a review of the project steering committee, a Final Site Development Plan will be developed and present to the City Management and City Council for approval. During the Site Development Plan stage, Mr. Gibbs and the Steering Committee will work to get construction cost estimates, based on the final design. The Committee will also look at potential phasing, if the determined to be necessary.

Following plan approval by City Council and the identification of project funding, the Site Development Plan will be expanded to a full set of construction plans and documents. (This process will likely be completed by an independent Landscape Architectural and/or engineering firm).

DEVELOPMENT COST

The final cost for the design, development and construction of the Sensory Garden can vary tremendously base on the type and quantity of material used, along with the number and quality of the detail elements. The edge treatment of the garden with the sidewalk and street will also play a major role in the cost—is it a soft or hard edge.

The cost of all construction material has been increasing at a rapid pace, even for basic concrete walkways. Elements within the garden, such as benches, planters, water features, shade structures and other items are much more than many realize, especially if looking for quality.



Due to the purpose of a Sensory Garden, this garden is going to have a lot of variation in the type, texture and location of elements. Some planters will need to be raised for wheelchair accessibility. An hard rolling surface will also have to be provided through the garden for similar reasons. Yet we will want to vary the pathway surfaces to offer a variety of textures to awake the sense of touch and feel. A Sensory Wall will likely also need to be a part of the design as well. How high, how long and of what material

will also have an effect on cost.

The largest ticket items in these gardens are typically the water features. The type, size and material will be a determining factor. Also, is it a stock item or a special designed item. Is it design to circulate water (thus needing pumps and filters) or simply to use direct (one time use) water. The Area will also need to have some lighting as well.

Special features will also need to be factored in. Is there special sound appliances, structures and furniture. What type of signage is used. Does the garden have audio information station and/or brail signage.

While it likely will be a minority cost, there will be a significant cost for very specific plant material. Due to the fact that a Sensory Garden seeks to offer many variations in size, texture and color of plants, as well as various smells and even taste there will need to be a need for proper planting beds. We will not be able to simply dig a hole and plant, but will need various and specific soils mixes and proper irrigation and drainage.

Due to all of these variable, it is impossible to provide a cost estimate at this time. We know that we are looking at a site of about 6,000 square feet. The, though, cost can easily range from as low at \$25/SF for a very simple, soft and open garden area to over \$100/SF for high quality finishes, materials and elements. A good budget for a quality Sensory Garden is likely going to range from \$300,000 to \$450,000.



HIGH POINT LIBRARY

A
SENSORY GARDEN
FOR HIGH POINT

HIGH POINT LIBRARY – SENSORY GARDEN



EXISTING SITE

HIGH POINT LIBRARY – SENSORY GARDEN



COMPLETE
CLOCK TOWER
PLAZA
– DESIGN BY
OTHERS

CONCEPT DESIGN

HIGH POINT LIBRARY – SENSORY GARDEN



CONCEPT DESIGN

HIGH POINT LIBRARY – SENSORY GARDEN



CONCEPT DESIGN

HIGH POINT LIBRARY – SENSORY GARDEN



CONCEPT DESIGN

HIGH POINT LIBRARY – SENSORY GARDEN



CONCEPT DESIGN

HIGH POINT LIBRARY – SENSORY GARDEN



CONCEPT DESIGN

HIGH POINT LIBRARY – SENSORY GARDEN



GATEWAY FROM CORNER PLAZA

HIGH POINT LIBRARY – SENSORY GARDEN



SENSE OF ENTRY - SHADE / SUN

HIGH POINT LIBRARY – SENSORY GARDEN



SUNSET DRIVE GATE

HIGH POINT LIBRARY – SENSORY GARDEN



WHEELCHAIR ACCESSIBLE PLANTERS

HIGH POINT LIBRARY – SENSORY GARDEN



WHEELCHAIR ACCESSIBLE PLANTERS

HIGH POINT LIBRARY – SENSORY GARDEN



WHEELCHAIR ACCESSIBLE PLANTERS

HIGH POINT LIBRARY – SENSORY GARDEN



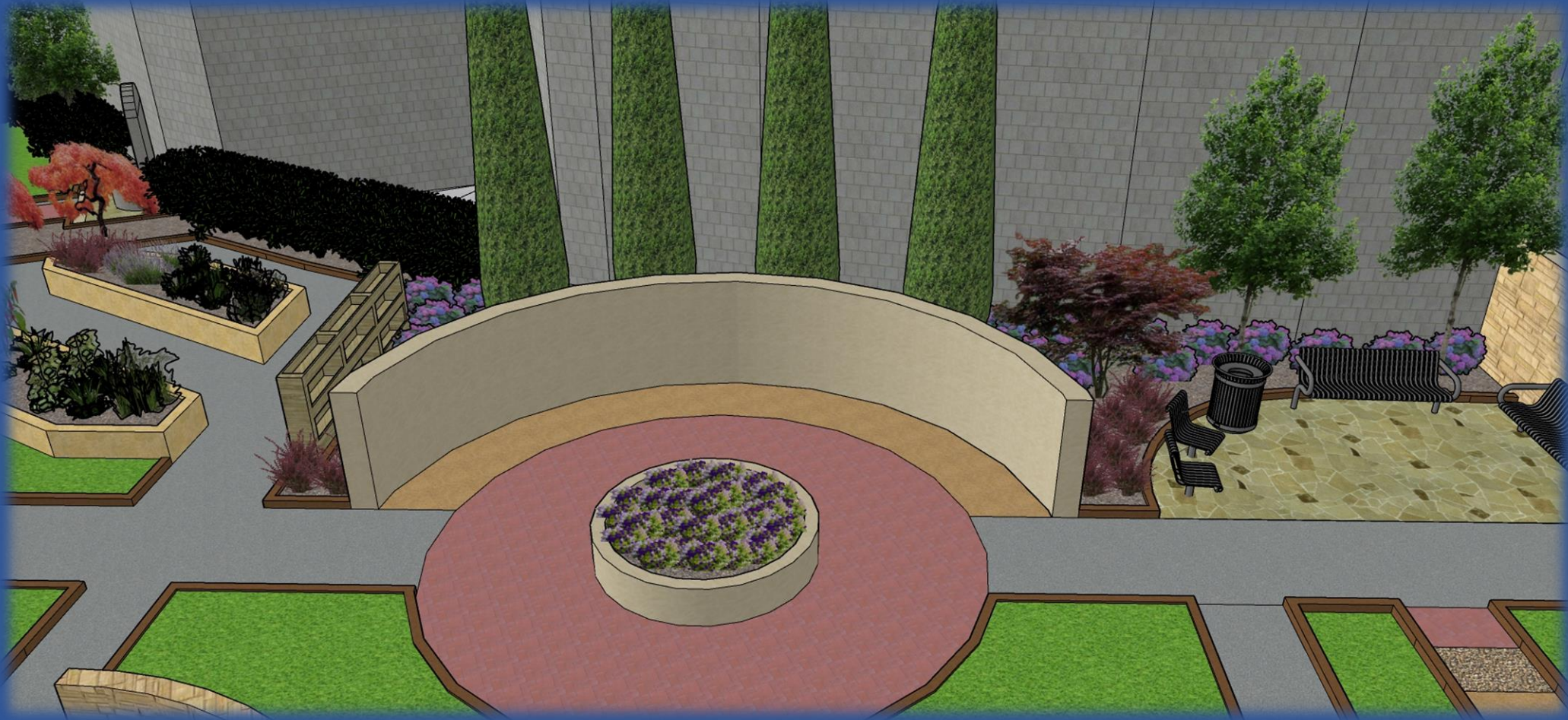
HERB PLANTING WALL

HIGH POINT LIBRARY – SENSORY GARDEN



SENSE OF SMELL / TASTE / FEEL

HIGH POINT LIBRARY – SENSORY GARDEN



SENSORY WALL

HIGH POINT LIBRARY – SENSORY GARDEN



SENSORY WALL – MULTIPLE SENSES

HIGH POINT LIBRARY – SENSORY GARDEN



CONVERSATION AREA - WELCOME AREA

HIGH POINT LIBRARY – SENSORY GARDEN



CONVERSATION AREA - WELCOME AREA

HIGH POINT LIBRARY – SENSORY GARDEN



OUTDOOR CLASSROOM AREA

HIGH POINT LIBRARY – SENSORY GARDEN



OUTDOOR CLASSROOM AREA

HIGH POINT LIBRARY – SENSORY GARDEN



SENSORY PANELS

HIGH POINT LIBRARY – SENSORY GARDEN



VERTICLE DISPLAY

SENSE OF SOUND, TOUCH, LIGHT, COLOR

HIGH POINT LIBRARY – SENSORY GARDEN



TEXTURE CHANGING PATHWAY

HIGH POINT LIBRARY – SENSORY GARDEN

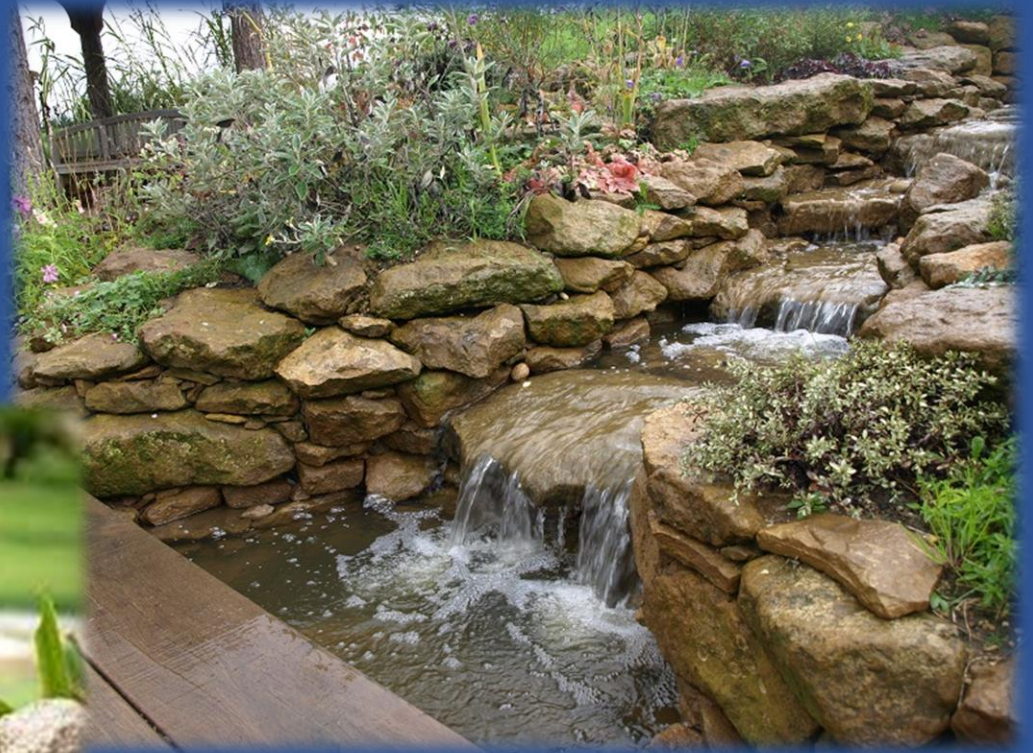
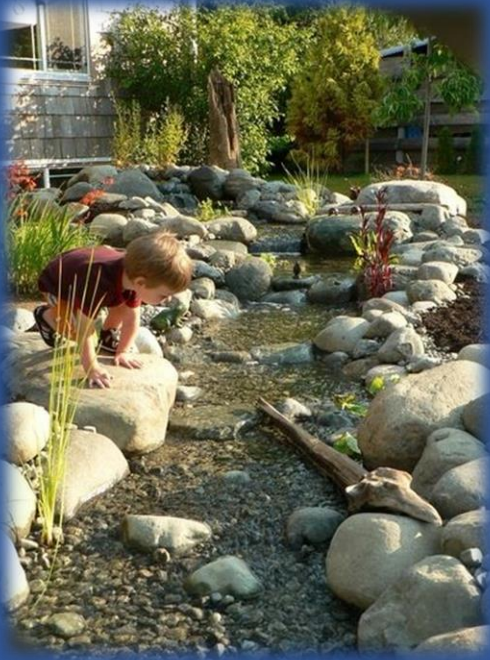


SENSE OF TEXTURE & FEEL

HIGH POINT LIBRARY – SENSORY GARDEN



HIGH POINT LIBRARY – SENSORY GARDEN



WATER PLAY: SOUND, FEEL, MOTION, TEXTURE

HIGH POINT LIBRARY – SENSORY GARDEN



REFLECTION GARDEN AREA

HIGH POINT LIBRARY – SENSORY GARDEN



COOL & QUIET

HIGH POINT LIBRARY – SENSORY GARDEN



REFLECTION GARDEN AREA

HIGH POINT LIBRARY – SENSORY GARDEN



SENSE OF ENCLOSURE, TEXTURE & COLOR

HIGH POINT LIBRARY – SENSORY GARDEN



SIDE ENTRY PLAZA

HIGH POINT LIBRARY – SENSORY GARDEN



STILL OR SLOW WATER – TOUCH & TEXTURE