SYNLAWN®

artificial grass never looked more natural.

South Shore Clean Cities



What is SYNLawn

- Plant-based alternative to natural grass
- The most advanced synthetic grass on the market today – SYNLawn offers the most current tech in Nylon, Polypropylene & Polyethylene Yarns.
- This state-of-the-art grass allows for applications in areas not possible with other artificial turf or existing field products

Among the Potential Uses for SYNLawn

» Commercial Market

» Trail landscaping, office parks, hotels, apartments and condos, malls, restaurants, amusement parks, kennels.

» Municipalities and Organizations

Schools, churches, parks and recreation, local government (medians, dog parks).

» Residential Market

» Lawns, landscapes, roof decks, patios, media rooms, putting greens, playgrounds, dog areas.

» Golfing Community

Country clubs, municipal courses, practice facilities, driving ranges.

Brief History of Synthetic Grass



- Artificial turf had its commercial birth when it was installed at the Astrodome in Houston, Texas in 1965.
- The use of artificial grass turf was almost exclusively limited to sports venue applications in the 1970's.
- By the 1980s artificial grass turf was installed at a number of soccer and football fields at the municipal levels.
- First generation artificial grass turf earned an infamous reputation because of its unforgiving nature and its "unrealistic" look. The industry still fights against old perceptions from this period.
- Mid 1990's as the technology used in the manufacturing process improved, artificial grass turf began to gain momentum again leading to the manufacturing of 2nd generation artificial turf.

Brief History of Synthetic Grass

- As technology advanced, long, lush grasses became available for production, breaking away from the ½ inch pile heights seen previously.
- In the late 90's early 2000's, turf using sand and/or rubber infill was developed – and manufacturers began using a different type of plastic which enabled the "third generation" of artificial grass turf to look extremely realistic in appearance.
- The industry has now evolved to a "fourth generation" technology process –using thatch zone to keep the fibers in the upright position and thus does **not** require rubber crumb for support. This both contributes to a realistic looking product with decidedly more "green friendly" design.



Brief History of Synthetic Grass



- Synthetic grass now is made from a high percentage of renewable content, with many of the traditional petroleum-based polymers being replaced with easily renewable components like soy.
- The most common types of yarns used today in artificial grasses are Nylon, Polyethylene and Polypropylene, all extremely soft and low abrasion yarns.

SNAPSHOT: ADVANTAGES OF SYNTHETIC GRASS

- » Little to no maintenance no mowing, watering, or fertilziing.
- » Saves up to 70% on water bills.
- » Saves money on maintenance costs.
- » Reduces carbon emissions caused by gaspowered lawn equipment.
- Looks green and healthy year round.
- » No fertilizers contaminating ground water.
- » Many design possibilities use grass in places grass has never been used, esp HIGH TRAFFIC.
- » Non-allergenic.
- » Clean no grass stains or dirt tracking.

Use of synthetic grass holds many advantages

Source EPA

- •Saves literally millions of liters of water each year from being consumed by lawn irrigation. A 2,000 square foot lawn would uses the equivalent of a large swimming pool per year in grass watering.
- •Several city water authorities particularly in the southwest and west are offering tax rebates or other forms of incentive for every square foot of natural sod you replace with artificial grass based on potential water savings.



- Where the previous perception may have been the indoor/outdoor lime green carpet, now synthetic lawn owners have manicured looking lawns all of the time.
- Hybrid artificial grass technology offers high performance resiliency and soft touch with variegated colors and realistic looking thick grasses. The average synthetic grass has two to three times the density and pile height of high grade indoor carpet.

- by reducing carbon emissions and fuel consumption from lawn equipment environmental conscience cities are paying close attention to which emissions and gases are released into their atmospheres the less the better.
- Synthetic grass is extremely hygienic as the product remains clean and does not act as a harbor for airborne allergens (compared to fresh cut grass).
- Maintaining natural grass lawns can have a negative impact on the environment when **toxic fertilizers and pesticides** contaminate ground water through run-off. Although many cities have limited the use of these products, many home owners circumvent the system to have a pristine looking lawn.



- Synthetic grasses are very easy to maintain, usually requiring only minimal upkeep. More upkeep may be necessary along road side areas due to road salt, sand, etc going onto the grass.
- SYNLawn offers Care & Maintenance
 Guidelines, including training, maintenance and
 groundskeepers.
- Leaf blowers are recommended as well as simple grooming machines.

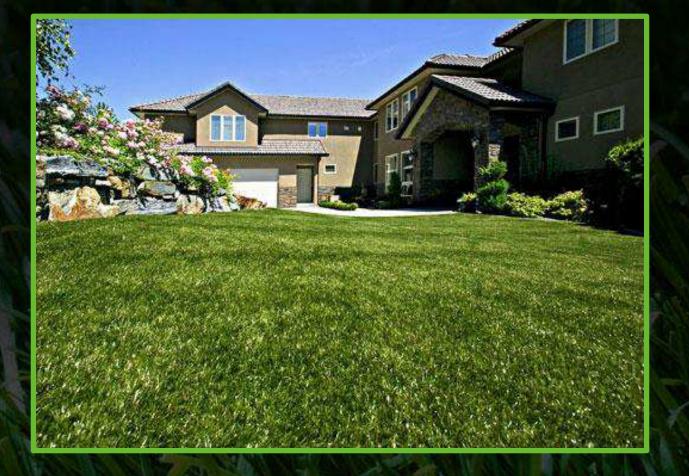
How Landscape Grass differs from Sports Field artificial turf



- Primary difference between synthetic grass sports fields and Landscape Applications (everything that is not a field) is that Landscape Applications do not require rubber crumb infill.
- Most sports fields require rubber crumb infill for the product to maintain its position and to stand up and for impact attenuation.
- Most landscape grass use a Thatch Zone technology to achieve this versus rubber crumb. Rubber crumb is messy and tends to migrate and requiring much higher levels of maintenance.
- Aesthetics is another primary difference. Landscape grasses are designed to mimic existing styles with varied lengths, variegated colors, and different blade characteristics etc, whereas sports fields tend to be very generic in appearance with less "features."

Have you had a "challenging" landscaping design which contained an area hard to grow grass or mow grass?

We have a solution for those difficult areas!



Welcome to SYNLawn!



Company Background

SYNLawn is an American brand...100% made in the USA and is a vertically integrated company from yarn to yard.

Recently, SYNLawn has joined forces with German-based *The Sport Group* broadening the SYNLawn brand to a world-wide audience.



Who is SYNLawn?

- ❖ SYNLawn is an industry leader in terms of 1) investment in the manufacturing facilities for its artificial grass product lines; 2) research and development (R&D) of existing and new products; and 3) personnel dedicated to the support of corporate and franchise sales of SYNLawn products.
- With our new partnership, we just opened a 480,000 s.f. turf manufacturing plant in Dalton Georgia. Last year we manufactured over 80 million s.f. of synthetic grass.
- The process by which SYNLawn is manufactured is similar to carpet manufacturing process.







Why SYNLawn?

- Advanced Installation Systems for...
 - Commercial and Residential landscape
 - Playgrounds
 - Fields
 - Golf
 - Pets
 - Rooftops
- Custom-made styles to fit any application.

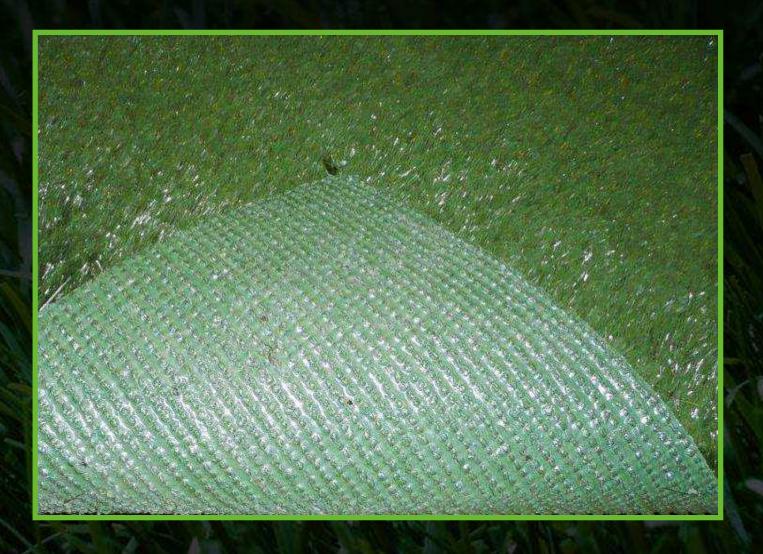
Why SYNLawn?

- Best Product Line
 - Widest Selection
 - Proprietary Products
- Product Development
 - In-house R&D with over 40 years of manufacturing experience.
 - Industry leading innovator.



SYNLawn Innovations

- » HeatBlock™ technology Reduces surface temperature on turf by incorporating infrared reflective pigments that help to reflect rays & dissipate heat build up (used in several product lines).
- » Antimicrobial technology –AlphaSan[®] helps prevent growth of bacteria and mold (used in one pet-friendly style of grass).
- » Structural technology. Yarn shape for dimensional stability
- Soy products used in lieu of petroleum for a more environmentally-friendly product.



Secondary Backing Innovations

Worries about air quality



- SYNLawn has been tested by Air Quality Sciences (US Gov't Certified lab) for 38 Volatile Organic Compounds and has been deemed safe for use both indoors and outdoors.
- Low VOCs

Green Story

- » Saves water and reduces carbon emissions from lawn equipment.
- » Over 60% of the petroleum-based polyurethane is replaced with soybean oil, a renewable resource.
- » Some secondary backing materials are manufactured from recycled plastic bottles.
- » Post manufacturing waste, coal ash, is used for added strength and dimensional stability.
- » Lower impact on local landfills with a long product life cycle and all SYNLawn products are recyclable.



Primer on Installation Process



- Proper ground preparation is essential to the life of the product. Temperatures must be above freezing for proper compacting.
- The proper amount of topdressing must be used, especially for areas with high traffic.
- Special topdressing can be used for pet odor control.
- SYNLawn is only as good as the installation.

Proper Ground Prep – remove top soil





Proper Ground Prep - Proper Grading and Elevation





Proper Ground Prep-Compacting





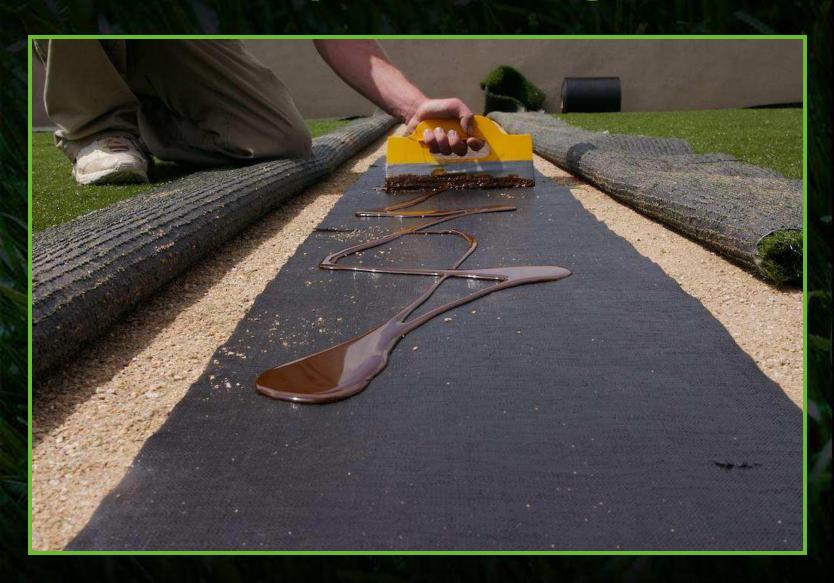
Proper Ground Prep — Layout





Proper Seaming





Proper Seaming





Proper Seaming





Rocks and Trees





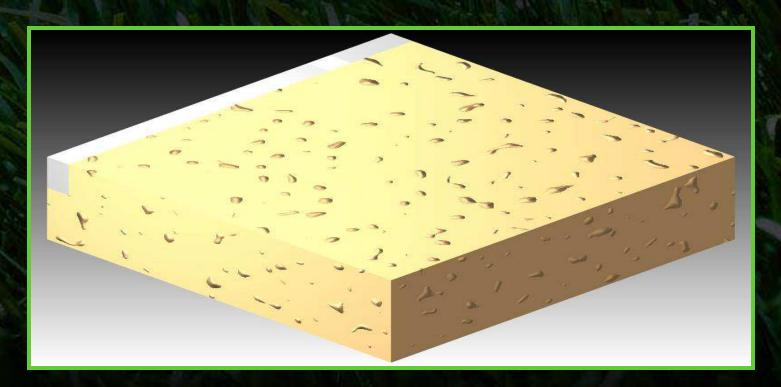
Trees - drip lines for watering



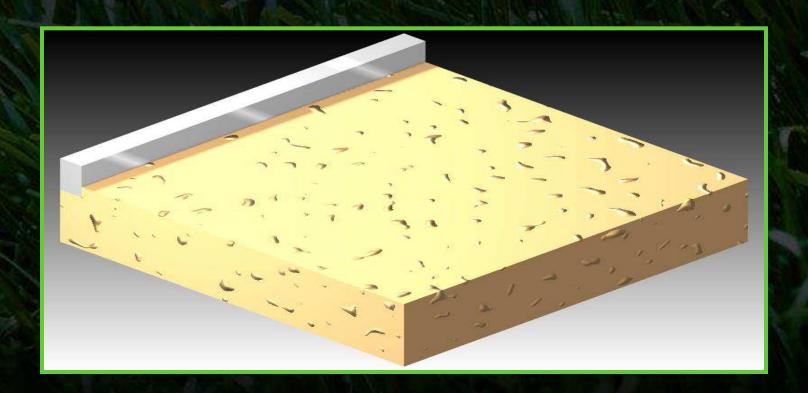


Installation Techniques

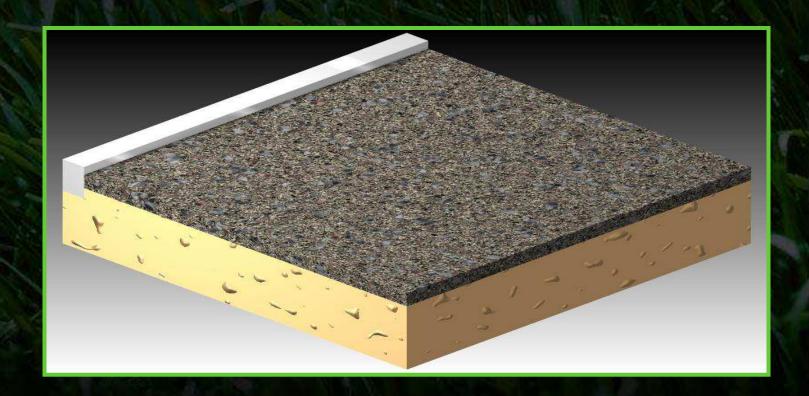
A typical commercial installation begins with a concrete curb around the border but may include side nailer boards, existing concrete nailers etc



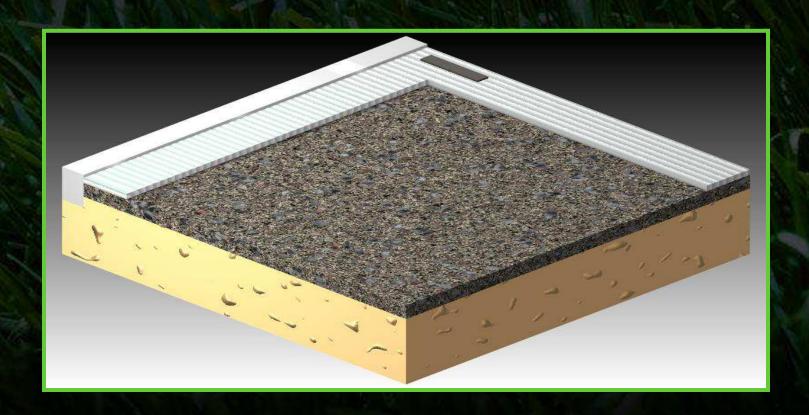
» Excavate approximately 4"



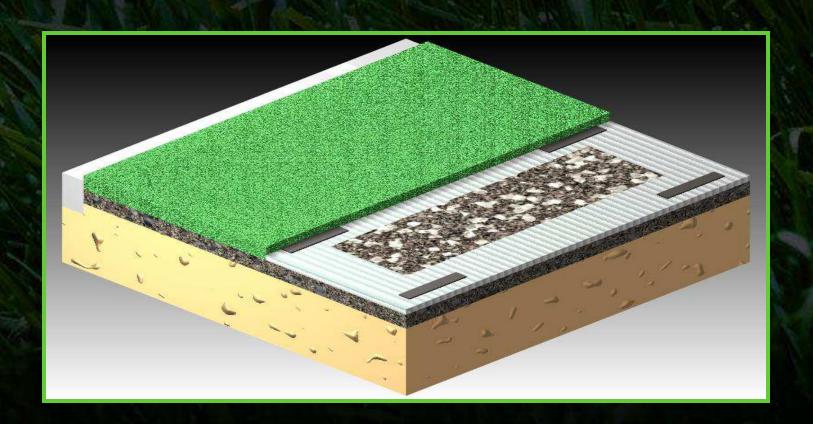
» Install and compact base aggregate and add optional odor reducing crystals



» Install composite perimeter board, securing every 2-3 ft with 12" galvanized spikes



» Install turf by nailing/stapling to composite nailer board at the seams as well as the edges.





Landscape Program

Example Applications





Example Applications





Pet Program Added Value

- Healthy environment
 - » No bugs, tics or spread of disease.
- » Beautiful lawn
 - » No dead grass or holes to fill.
- » Control odors
 - Easy maintenance.
- » Rodent control
 - » Keeps rodents out of the lawn.

Pet Program Added Value

- » Dogs stay clean
 - » No more mud, dirt or grass tracked into the house.
- » Optimal drainage
 - Can be used right after rain and the pet stays clean.
- » Security techniques
 - » Reduces or eliminates damage for destructive pets.

Odor Control

Zeolite or Envirofill crystals for odor control: (either sub-base or as topical treatment)

SYN1440 Top for Infill



SYN140 for Base Material



Example Applications









Playground Program

Synthetic Turf

Color Innovations





Some Advantages of SYNLawn products on Playgrounds

- » Synthetic grass is the most appealing surface for playgrounds.
- » SYNLawn provides credible and consistent standards of safety.
- » SYNLawn playground surfaces can be green in color and green in nature.



Value Added - Playgrounds

- » Easily replaceable TrampleZones.™
- » Maintains consistent safety protection without the maintenance cost of replenishment (gravel or mulch).
- » Non-allergenic.
- » Non-abrasive softer touch.
- » Aesthetics natural grass appearance.
- » No grass stains.

Value Added - Playgrounds

- » Relatively easy to clean.
- » Drains well immediate use after rains.
- » Stable in all climates.
- » Cooler than other surfaces and doesn't radiate heat.
- » Qualifies for water rebates and LEED credits.
- » Contains recycled content and renewable resources.

8-10' Fall Height





© Copyright SYNLawn artificial grass. All rights reserved.

Value Added - Playgrounds

- » Solution for ANY fall rating and safety standards.
- The only artificial grass playground surface with CONSISTENT safety ratings over time.
- » ADA accessible.



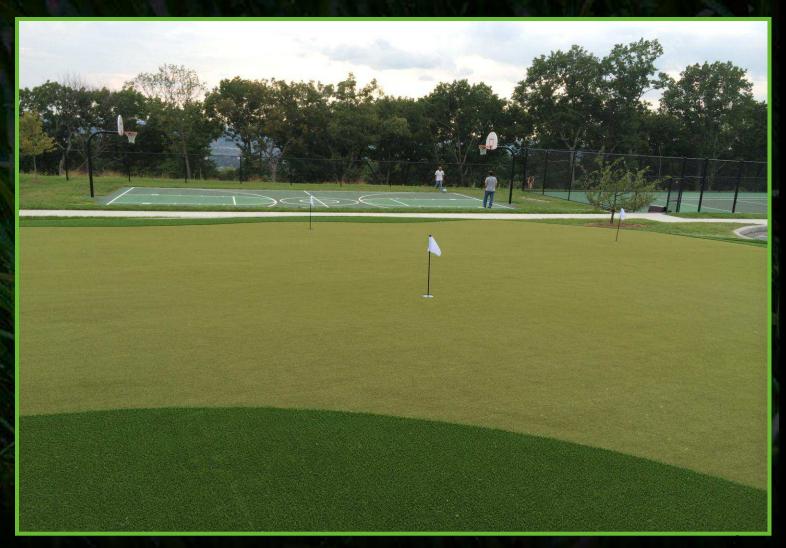






Integrated With Other Sports Park Applications







Roof Deck and Patio Program

Current Issues with Rooftops

- » Aesthetics
 - » Boring concrete or splintered wood surfaces.
 - » Distorted rubber membrane or old tar surfaces.
- Usability
 - Many rooftops are made for service only.
- Safety
 - Restricted access & slick surfaces, fire ratings (SYNLawn makes only synthetic grass with Class 1 fire rating)

Green Rooftops vs. SYNLawn

- » Natural Green Rooftops
 - » Over a decade in the works.
 - » Heavy weight of grass, soil and water.
 - » High maintenance costs.
 - Eye sore if not keptup.
 - » Sensitive to foot traffic.





Green Rooftops vs. SYNLawn



- » SYNLawn
 - » Aesthetics.
 - » Light weight.
 - » Extreme usability.
 - » Water conservation.
 - » Low maintenance.
 - Environmentally friendly.



Value Added -- Rooftops

- » Creates outdoor living spaces.
- » Creates entertainment areas outdoors potential revenue stream for commercial buildings.
- » Provides pet areas above ground.
- Lightweight with drainage built-in.
- » Virtually no maintenance.
- » Class I fire rating with nylon surface.
- » Non-slip surface and wheel chair accessible.
- » Increase property value with usable square footage.
- Easy to install with limited access.



Rooftop Applications

- » Roof decks
- » Commercial rooftops
- » Concrete patios
- » Concrete pool sides
- » Terraces
- » Balconies



Example Rooftop Applications

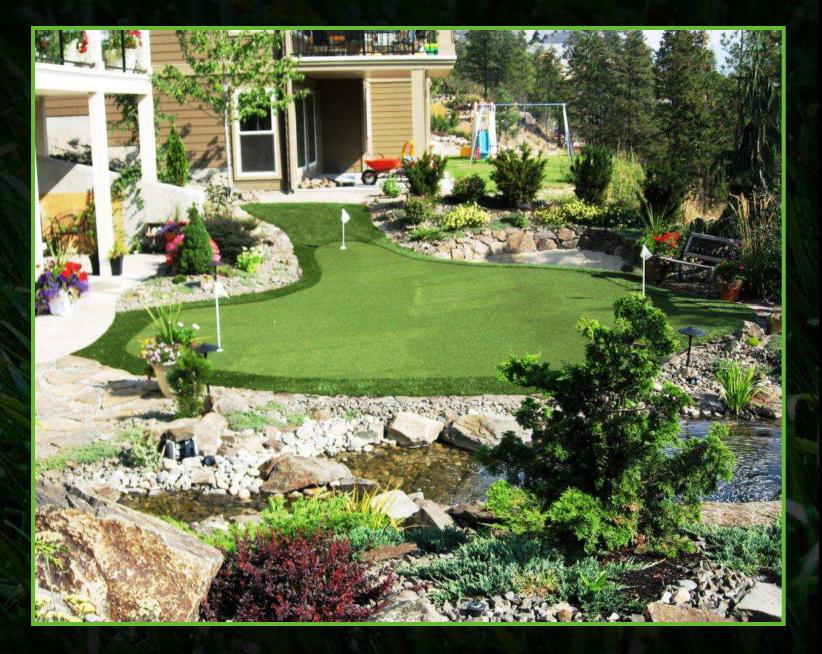




Example Rooftop Applications







Golf Program

Quest for Realism

- » SYNLawn putting greens are proven to be the closest in performance to natural greens.
- » Natural ball reaction from chips.
- » Consistent ball roll.
- » Designs follow strict specifications to be installed with natural golf course characteristics.
- » Aesthetics natural colors starting with lightest color for greens and darkest color for rough.

Value Added - Golf

- » Proven realistic performance as tested by renowned golf teaching pro, best-selling author and NASA physicist Dave Pelz.
- » Realistic aesthetics in color, grass height and installation.
- » Consistent ball performance with nylon products as proven by golf consultant Dave Pelz.
- » 'GreensMaster Certified' installations ensure best conditions for golf games.

Natural Greens





Example SYNLawn Applications





Example SYNLawn Applications









Questions and Answers



Benefits to the City



- Virtually maintenance free very low upkeep – Work Safe City friendly
- Water savings vs. Traditional Landscaping
- Handles high traffic and is extremely resilient
- Ideal for medians, slopes, lowlight areas
- Positive compliment to Communities in beautification programs
- 8-10 year prorated Warranty

Benefits to the City





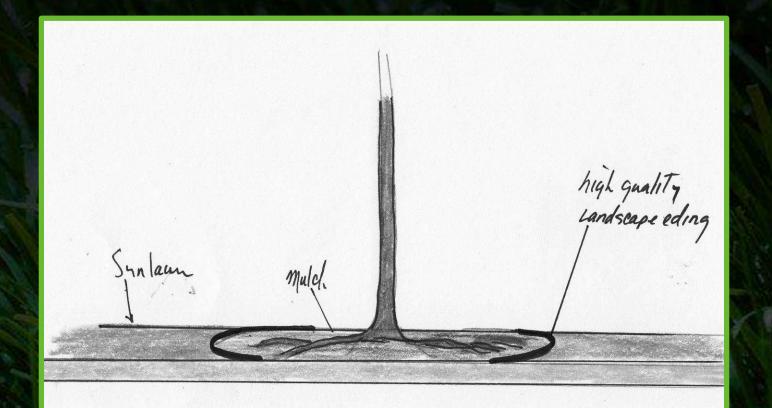
- Helps beautify areas that otherwise have no option other than concrete/pavement or live plants and grasses
- Cost effective compared to other meridian options (Stamped concrete, xeriscaping)
- Saves water and easy clean up
- Quick install w/ minimal traffic interruption
- No infill required



City of Kelowna - Medians



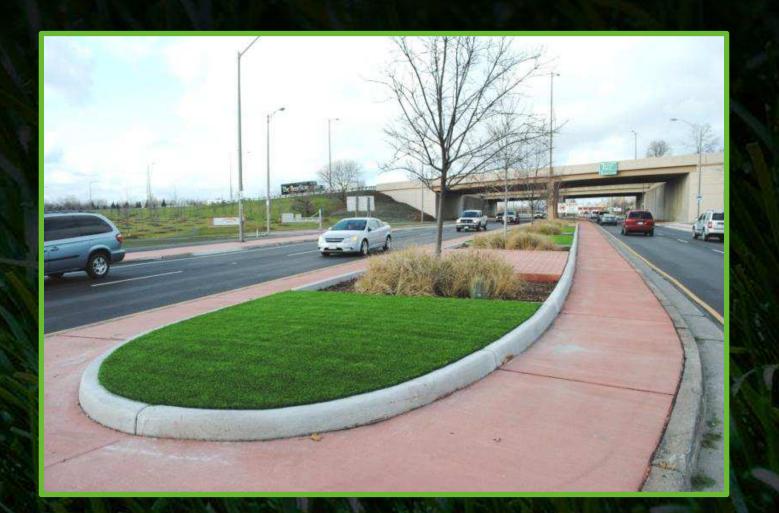
Example area



Proposed Tree & Root Detail



City of Kelowna - Medians



Example: City of Windsor



City of Windsor - Medians



Example: City of Windsor



City of Kelowna - Medians



Before & After



City of Kelowna Medians



Example:

Highway 97 - Conceptual Comparison



Las Vegas Medians



Example: SYNLawn Median

SYNLawn Website



Indiana Website: www.synlawn.com/Indiana

Corporate Site: www.synlawn.com

Visitors can enter a zip code and go to the local Indiana landing page