Sec. 60.224. - Artificial Turf.

The use of artificial turf is permitted subject to obtaining a permit from the Permitting Division and compliance with the provisions of this Section. All artificial turf shall, at a minimum, be installed according to the manufacturer's specifications and may be subject to further City stormwater requirements.

- (a) Location. The installation of artificial turf is permitted on residential, private parks and schools, commercial sites and limited to play areas of public parks and institutions subject to the requirements of this Section. Installation of artificial turf within public and private rights-of-way is prohibited. Artificial turf may not be installed within 50 feet of any artificial or natural water body. Within Historic Preservation Districts, artificial turf may not be installed where it is visible from any rights-of-way; further, a minor Certificate of Appropriateness is required when applicable. Artificial turf is prohibited within drainage features (e.g. retention ponds, swales, and etc.) Artificial turf must be installed outside of the drip line of any tree.
- (b) *Impervious Surface Ratio*. The installation of artificial turf shall be calculated as an impervious surface, as the intent of the Landscape Code is the installation of living, sub-tropical materials on pervious areas of the site. Total impervious area calculations shall be submitted with any artificial turf application. The quantity of artificial turf to be incorporated into the landscaping of a property shall be limited by the maximum impervious surface ratio (ISR) for the subject property within the applicable zoning district and location requirements above.
- (c) Appearance. Artificial turf shall consist of materials that appear natural in appearance and color from any public or private rights-of-way, neighboring properties or natural features (wetlands, lakes, parks, common areas etc.) Other generally accepted colors will be reviewed by the Appearance Review Officer. The use of indoor/outdoor plastic or nylon carpeting as an installation of artificial turf is prohibited.
- (d) *Maintenance*. All artificial turf shall be maintained in a fadeless condition and shall be kept free of dirt, mud, stains, weeds, debris, tears, holes and impressions, Maintenance shall include, but not be limited to: cleaning, brushing, debris removal; repairing of depressions and ruts to maintain a visually-level surface; elimination of any odors, flat or matted areas, weeds, and evasive roots; and all edges of the artificial turf shall not be loose and must be maintained with appropriate edging or stakes.

All artificial turf must be replaced if it falls into disrepair with fading, holes or loose areas. Replacement and repairs shall be done with like materials from the same manufacturer and done so in a manner that results in a repair that blends in with the existing artificial turf.

(Ord. No. 2013-74, § 1, 12-9-2013, Doc. #1312091207; Ord. No. 2021-49, § 1, 8-23-2021, Doc. #2108231204)

Artificial Turf

Required Permit

Engineering Permit Application

Artificial grass requires an engineering permit as it is considered to be impervious surface. Each property is limited to the amount of impervious surface. Please allow 2 business days to process the permit application after you have submitted.

Check Your Eligibility

Ensure you meet the <u>requirements</u> and do not go over the amount of impervious surface in your property by calculating your ISR (impervious surface ration.) To do this you will need to calculate:

- Impervious Area in sq. ft. / Entire Lot Area in sq. ft. = ISR
- Example: 4,000 sq. ft. impervious / 10,000 sq. ft. lot = 0.4 or 40% ISR
 - Artificial turf, concrete, pavers, bricks, etc. are considered impervious.
 - If you have a pool, the city does not count the surface of the pool water toward the calculation.
- No more than 40% front yard ISR is allowed Municipal Code 61.302(b)
- No more than 55% entire lot ISR is allowed within the following zoning areas:
 - R-1AA R-1 R-1A R-1N R-2A
 - No more than 60% in R-2B and R-3A zoning
- For PD zoning, email cityplanning@orlando.gov
- Artificial turf is not allowed within 50 feet of a water body, such as a retention pond or natural lake.

Notice of Commencement/Owner Builder Declaration

If you are doing work as the homeowner and not hiring a contractor, the State of Florida requires you to submit an <u>Owner/Builder Declaration</u> form with the engineering permit application. You must sign this form must in person, at the Permitting Services office.

If the job is more than \$2,500, you must provide the city with a copy of the recorded Notice of Commencement. Click <u>here</u> to file a Notice of Commencement.

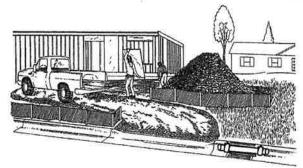
Required Plans & Documents

- Site plan/survey/plot plan: this is a drawing of your property which includes property lines, easements, signed and sealed by a surveyor which you should have received at time of sale for your property. If you are unable to locate your plan you can <u>submit a records request</u> to see if we have it. Please contact a surveyor if we do not have a copy on file or the plan is outdated.
- Show where the artificial grass is being placed by shading/highlighting the area and include dimensions (L x W)
- Distance between the property line and where the artificial grass starts (L x W)
- Include the ISR calculation on your plans
- Include the artificial turf product specifications
- The following statement must be included in your plans: The <u>City of Orlando's Guidelines for Erosion Sediment Control</u> will serve as a guide for the implementation of erosion sediment control measures. **This document must also be uploaded as part of the submittal package.**

After your application is processed, the digital applicant will receive an email with a link to access the digital plan review system, ProjectDox. Follow the upload requirements.



FOR CONSTRUCTION SITES



By controlling erosion and sedimentation, Orlando builders keep our streets and waterways clean.

Erosion Is a Costly Problem

Eroding construction sites are a leading cause of water quality problems in Florida. For every acre under construction, about 1 ½ dump truck loads of soil wash into the stormwater system and into a nearby lake unless builders use proper erosion control measures.

Controlling Erosion Can Be Easy

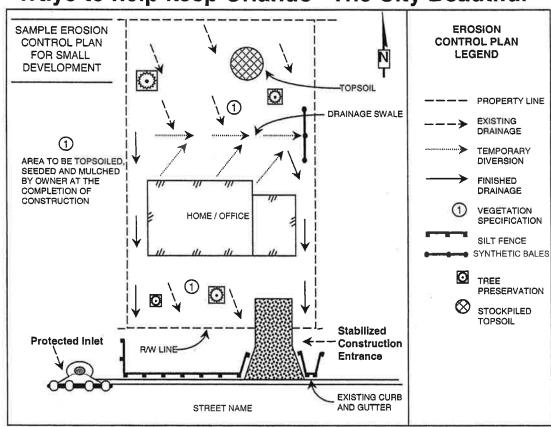
Erosion control is important and necessary for all development sites. The materials needed are easy to find and relatively Inexpensive - silt fencing, synthetic bales, stakes, inlet protection, and grass seed. Putting these materials to use is a straightforward process. Maintenance to those Best Management Practices (BMP's) is key to staying in compliance.

This fact sheet includes shows step-by-step instructions that can be used by builders. Additional controls will be needed for sites that are adjacent to lakes, wetlands, and streams, have steep slopes, receive runoff from adjacent land, or are larger than one acre.

When areas are stabilized and not endanger of eroding, the temporary erosion control measures can be removed. BMP's should not be left on finished sites.

For more information on erosion and sediment control issues and how you can help save our lakes, please contact the City of Orlando Streets and Stormwater Hotline at 407-246-2370.

Ways to help keep Orlando "The City Beautiful"

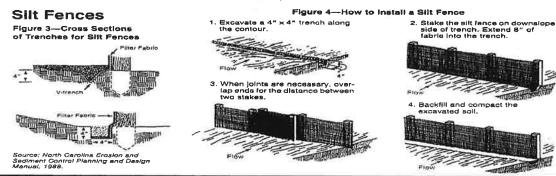


Under the Stormwater Utility Code, Section 31.19, the City prohibits the discharge of pollutants (including sediment and construction debris) into lakes, stormwater drains, or any part of the stormwater conveyance system (ex. streets, gutters, alleyways, ditches, canals, parking lots, and retention/detention ponds, etc.). For more information about erosion and sediment control, refer to the Florida Development Manual: A Guide to Sound Land and Water Management, and the FDEP Erosion, Sediment, and Stormwater Inspector Manual. Violators may be subject to civil penalties, citations, pollution abatement costs, and/or action by the City of Orlando Code Board.

COMMONLY USED EROSION CONTROL MEASURES

PERIMETER CONTROLS

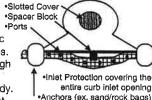
- •Examples may include trenched-in silt fence, trenched-in synthetic bales, berms, sod buffers, waddles, turbidity barrier, etc. •Install within 24 hours of land disturbance.
- •Ensure that perimeter controls are installed properly (trenched-in, no gaps, appropriate BMP for conditions) and maintained until area is stabilized.
- Special attention to perimeter controls needs to be taken along sensitive and critical areas such as wetlands, waterbodies, stormwater systems, roads, adjacent parcels, etc.
- •Inspect, repair, replace, and remove accumulated sediments weekly and after ½ inch rain event.



STORMWATER SYSTEM PROTECTION

- •Examples of stormwater systems may include stormwater inlets and grates, ditches, swales, retention/detention ponds, canals, lakes, etc.
- •Method of protecting on-site and off-site stormwater systems include properly installed synthetic bales, silt fence fabric, filter fabric, sock-covered perforated pipe, or other inlet protection devices. •In problem flood-prone areas (such as streets), ensure that floodwaters can be alleviated through ports and bypasses.
- •Floating turbidity curtain may need to be Installed for added protection to the receiving waterbody. Inspect, repair, replace, and remove accumulated sediments weekly and after ½ inch rain event.

Prevent Flooding when using Inlet Protection;



Anchors (ex. sand/rock bags) to hold ends down

OFFSITE TRACKING

- •Prevent offsite tracking of sediment onto streets by stabilizing the site entrance.
- •Examples include at least 50 foot of gravel with geo-fabric underlay, tire wash area, etc.
- At the end of each workday, remove sediment by sweeping and scraping up soil tracked onto the street. Frequent sweeping of street and curb line will prevent sediment accumulation.
- Sediment in the streets and curbs can become major safety and environmental hazards for your site. Sediment can impede traffic, cause flooding, and degrade lakes.

SOIL STOCKPILES

- •Locate away from any down-slope street, driveway, stream, lake, wetland, ditch, or drainageway.
- •If stockpiles are located near a perimeter, cover stockpiles with plastic sheeting.
- Add perimeter controls at the toe of stockpile.
- •Wet down exposed soil with a light spray or sprinkler to keep dust and erosion at a minimum.

STABILIZE AREAS

- •Wherever possible, preserve existing trees, shrubs, and other vegetation to minimize exposed areas.
- Stabilize exposed areas immediately. Do not wait till end of project.
- *Stabilization can be achieved with sod, seeding, mulch, erosion control blankets, etc. Hard armor (ex. rip-rap, netting, concrete, rock, etc.) may be more appropriate in channels, flumes, steep slopes, swift moving water, etc.
- Revegetate exposed areas with seed, sod, or mulch as soon as possible.
- •To prevent root damage to existing trees, do not grade, place soil stockpiles, or park near trees marked for preservation.
- •Mulch may need to be anchored down by disking, crimping, or nets. Sod may need to be anchored down with staples especially on side slopes.
- Seed and sod must be watered and maintained to establish effective cover per City Engineering Standards Manual specs.

DEWATERING OPERATIONS

- Dewatering a site to install underground utilities will require a permit through the Water Management District (St Johns River WMD 407-659-4800 or South Florida WMD 407-858-6100).
- •Dewatering methods include well-points, sock filters, sump pumps, etc.
- Directing the water offsite will require the discharge to meet FDEP Surface Water Quality Classifications (62-302.530). The water will need to be tested for pollutants.
- •Turbidity levels on the discharge water shall not exceed 29 N.T.U.'s above the receiving waterbody. This can be achieved through well-point and sock filter methods, velocity controls, armored spillways, sediment basins, use of chemical clarifiers, etc.
- •Floating turbidity curtains should be installed in the receiving waterbody. Curtain must extend to bottom of waterbody and attached to sides of bank.



MAINTENANCE TO BMP's

- •Inspect BMP's at least daily and after 1/2 inch rain event.
- •Remove sediment and repair spots of erosion immediately.
- If site is subject to NPDES permitting (1+ acres disturbed), keep a weekly log of erosion control efforts.

For more information on Erosion and Sediment Control Issues and how you can help save our lakes, please contact the City of Orlando Streets and Stormwater Hotline at 407-246-2370.