

**Specific recommended management guidelines for
 _____ _ Main Field (94,000 sq.ft.)**

| Month | Material/Procedure | Rationale | Time |
|--------------|--|--|-------------|
| March | Core Field | Winter dormancy and dead thatch has been accumulated at the surface layer. Coring the surface allows oxygen transfer to the root zone to initiate decomposition and to stimulate growth. | 4 hours |
| | Obtain Samples | A composite sample of the sand profile and reclaimed water source should be taken and submitted to the agricultural lab for nutrient analysis. The analysis will provide data as to nutrient shortages so additions or deletions can be logically adjusted for the rest of the year. | 30 min. |
| | Apply 626 pounds of a granular 15-15-15 fertilizer | The general purpose fertilizer provides N, P, and K nutrients at the rate of 1 lb./1000 square feet. (15 is the percentage of the nutrient of total bag weight). Application should be done right after core aeration, as some of the granular material will then fall into the holes and dissolve slowly in the damp sand, with the balance of nutrients gradually released when the occasional rain event will occur during the spring months. | 4 hours |
| | Apply 2000 pounds of Gypsum | Calcium Sulfate (Gypsum) supplies two other essential nutrients that will be consumed during turf growth, especially needed for new root development. | 4 hours |
| | 280 pounds of Kentucky Blue grass seed (or original species seed from sod source) | Applying new seed right after core aeration provides potential new grass growth as some seeds will fall into openings and have the ability to germinate, providing new growth among old grass stands. | 2 hours |
| April | Apply 626 pounds of granular 15-15-15 fertilizer | At this time modify the general formulation of N,P,K based on the recommended results obtained from the lab analysis. For example if P, K values are adequate, a 10-2-5 fertilizer | 4 hours |

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| | | may be more appropriate. | |
| | Add missing micronutrients | If the lab report shows deficiencies in Mg, Mn, Zinc etc., these nutrients can be added in proper amounts with the base fertilizer or separately. The fertilizer supply houses can recommend formulations based on the lab report. | 2 hours |
| | Apply 23 pounds of Iron | Iron is an essential nutrient that is often missing in sand profiles. The application of granular Iron sulfate or chelated liquid iron formulations can correct this problem. Adjust levels based on lab results. | 2 hours |
| May | Core field | As growth starts to accelerate, coring the field will provide additional oxygen access to the root zone. | 4 hours |
| | 280 pounds of Kentucky blue grass seed | Additional seeding provides an overlap in growth stages and supplements germination areas that may not have rooted in March. Spot seeding of problem areas can even out growth. | 2 hours |
| | Apply 450 pounds of ammonium sulfate by dissolving product and recirculating subsurface. | Ammonium sulfate is an inexpensive nitrogen source that also has the benefit of lowering the pH levels of water. Reclaimed water has a tendency to have pH levels around 7.8 or higher due to the alkaline soap content from sewage water. By lowering the pH the growing environment for grass becomes more optimum. Follow recommended sub-fertilization procedures. | 4 man hours set up 10 recirculating hours for pump |
| June | 450 pounds of ammonium sulfate | Reapply sub-fertilization procedure | 4 + 10 |
| | Pull weeds | Pull out unwanted weed growth early as seen so they don't proliferate, and chemicals do not become necessary. | 2 hours |
| July | 450 pounds of ammonium sulfate | Reapply sub-fertilization procedure, or if growth is vigorous do 225 pounds every two weeks. | 4 + 10 |
| August | 450 pounds of ammonium sulfate | Reapply subfertilization procedure, or if growth is vigorous do 225 pounds every two weeks. | 4 + 10 |
| | Insect control | Start paying attention to unusual grub | Passive |

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| | | or insect infestations that may need treatment, as it is the primary month for ideal insect proliferation conditions. | visual |
| September | | Only routine mowing | |
| October | | Only routine mowing | |
| November | Core aerate | | 4 hours |
| | 280 pounds Kentucky Blue seed | Overseed for winter dormancy. Some seeds will still germinate before dormancy in winter and be viable for early growth | 2 hours |
| | Apply 235 pounds of granular 0-20-20 fertilizer | Applying P,K nutrients strengthens root growth to survive the winter months. | 2 hours |
| All months | Maintain grass height to 1.5" height Or as recommended by agronomist) | Mow at least once per week in the early and late months, and twice per week during May, June, July, August with a sharp mower. Mow in alternating patterns. | 2 hours per event |
| All months | Maintain adequate and proper moisture levels. | Normal operating level is about ¾" above current overflow rim at outlet vault. (Mid point of 6" Manifold lateral SDR 35 Pipe) For a wetter field place 6" extension in outlet fitting and turn on recirculating pump to add more water. Field can be flooded, (ground squirrel control) but do not maintain flooded condition for more than one day. Shut off water supply and let water recede to normal operating levels. Do not flood more than once per month. For a drier surface shut off water supply for two days and let water recede to below normal operating level. This may be preferred a day before games for a drier surface. Do not keep the water shut off for more than seven days during the growing season, as the sand will dry out too much and it takes two days to attain normal operating level. Areas that are the last to receive the water may become too stressed. (Too little water too late) | 30 minutes |

Sub fertilization procedure (Optional)

1. Do not proceed with subsurface fertilization until the field is at saturation at normal operational levels and return flow is established to recirculating reservoir.
2. Set timer to manual to activate recirculation pump.
3. Place extender in 6" overflow elbow at outlet vault.
4. Connect water hose from nearest supply near recirculation reservoir.
5. Using five gallon pails dissolve ammonium sulfate crystals in pail with water from hose and stirring with wooden stick. About a ¼ bag of ammonium sulfate should dissolve easily in one pail. (can be applied to other soluble fertilizers formulations)
6. Pour solution into sump pump vault and prepare more concentrate until the entire calculated amount has been added.
7. Continue recirculating operation for 24 hours.
8. Keep extender in outlet vault in place until water level recedes below normal overflow rim. (midpoint of 6" lateral). The evenly diluted solution is now available in each chamber and will slowly capillarize into the surrounding sand root zone.