

Invasive Plant Control, Inc. PO Box 50556 Nashville, TN 37205 (615) 812-5313 lee@ipc-inc.org

April 16, 2015

Peter W. Schneider, Water Quality Supervisor City of Greensboro Stormwater Management Division 2602 South Elm-Eugene Street Greensboro, North Carolina 27406

Dear Mr. Schneider:

Thank you for giving Invasive Plant Control, Inc. (IPC) the opportunity to put together the enclosed proposal for the management *for* **Vegetative Maintenance Services associated with the Stream Corridor Reforestation Project**. IPC is one a few the companies in the United States whose **sole** purpose is the management of invasive plant species nationwide. Invasive plant management requires remarkably different methodologies than traditional vegetation management. Focusing specifically on invasive plants has allowed Invasive Plant Control, Inc. to become one of the nation's leading private entities for controlling invasive plants.

Since its inception as a national company in 1997 Invasive Plant Control has controlled invasive species from the Virgin Islands to the Adirondack Mountains of New York. The company is owned and operated by Lee Patrick and Steve Manning. IPC strives to provide the highest quality service and maintain long-term relationships with all of its clients. We are proud of all the work we have completed in the past and recommend you contact the references located in the appendices or the proposal.

IPC will be available to meet April 27 – May 1, 2015 for a potential consultant interview. If you have any questions please do not hesitate to contact myself (615-812-5313) or Steve Manning (615-969-1309).

Thank you again!

Warmly,

Lee Patrick Vice President

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# **Technical Proposal**

# **Maintenance Services to be Provided**

Although the list below has been noted for treatment in following years of the **Stream Restoration Project**, other plants listed by the NC Exotic Pest Plant Council (NC-EPPC) to be invasive will be considered for treatment once consultation with Greensboro staff has been alerted. A list of North Carolina invasive pest plants can be found at <a href="http://nc-ipc.weebly.com/nc-invasive-plants.html">http://nc-ipc.weebly.com/nc-invasive-plants.html</a>

- Autumn olive (*Elaeagnus umbellate*)
- Bradford pear (Pyrus calleryana 'Bradford') \*added 2008
- Bush honeysuckle (*Lonicera species*)
- Chinese Privet (*Ligustrum sinensis*)
- English ivy (*Hedera helix*)
- Japanese honeysuckle (*L. japonica*)
- Japanese hops (Humulus japonicus)
- Japanese privet (*Ligustrum japonica*)
- Japanese stilt grass (*Microstegium vimineum*)
- Johnson grass (Sorghum halepense)
- Lesser celandine (*Ficaria verna*) \*Alert: *F. verna* is considered an early detection/rapid response species. It has been identified on <a href="www.eddmaps.org">www.eddmaps.org</a> as occurring in one location in Guilford County (Bog Garden at Benjamin Park). Upon surveying the sites in preparation for the RFP Proposal, *F. verna* was identified in Gillespie GC and Starmount.
- Mimosa (Albizia julibrissin)
- Multiflora rose (*Rosa multiflora*)
- Porcelainberry (Ampelopsis brevipedunculata)
- Princess tree (Paulownia tomentosa)
- Rose of Sharon (Hibiscus syriacus)
- Tree-of-heaven (Ailanthus altissima)
- Winter creeper (*Euonymus fortunei*)

These species are considered by the Southeast Exotic Pest Plant Council to be extremely invasive or at least has the potential to become invasive within natural areas.

While the above mentioned plants have been treated, seed banks and minimal resprouting will occur. Invasive plant control for 2011 will consist of one fall treatment, while 2012-2014 will have a spring and fall treatment, which will include foliar treatment of all species and cut-stump treatments of remaining Mimosa, Porcelain berry, Oriental bittersweet, Bradford pear, and other invasive trees and shrubs.

IPC recognizes that individual pest plants species may have different treatment regimes and should be considered on an individual bases according to a variety of variables, including intensity, size of plant, plant type, chemical susceptibility, and seasonality. IPC



proposes the following management practices to maintain acceptable control of the invasive plants and to promote the growth and regeneration of the native species.

# TREATMENT RECOMMENDATIONS

Invasive Plant Control, Inc. bases it management on an Integrated Pest Management approach (IPM). IPM is the use of several management tools to reduce the use of herbicides while achieving a high rate of success. Reducing the use of herbicides is most often achieved not through elimination of chemicals, but instead through the application method. Understanding the difference between the natives and non natives allows our employees to be target specific. Utilization of the best equipment on the market reduces wasted product and the combination of mechanical and chemical tools allows for a more specific control of undesirable species.

\*All chemicals used in this project are labeled for aquatic use. The chemicals of preference will be Rodeo (or glyphosate equivalent) or Garlon 3A (triclopyr). If there is any change as to the preferred chemical usage, the contracting officer will be notified and acceptance be granted before treatment is to begin.

\*\*Due to the nature and sensitivity of the stream bank stabilization and erosion, IPC recommends that grubbing of plants be prohibited or at least limited in scope.

**Details on work schedule:** There will be a 2 to 3 person crew at the sites the majority of the time.

A preliminary schedule is as follows:

Activity	June 2015	Sept 2015	May 2016	Sept 2016	May 2017	Sept 2017	May 2018
C&T trees	X	X	X		X		X
C&T vines	X	X	X	A STATE OF THE STA	X		X
C&T shrubs	X	X	X		X		X
FT	X	X	X	X	X	X	X
Chipping	X	X	X		X		X

BB = basal bark

C&T = cut & treat

FT = foliar treat

Weather will be a factor in determining the method of treatment or if treatment can even occur. IPC will not treat vegetation in the event of rain. IPC has the ability of treat up to the point of rainfall with a special surfactant that is rain-fast immediately after application. It would be optimal to be removing debris in the times of rain.

Drought is also a consideration and may hinder the effects of the treatments. Once there is a drought concern, the contracting officer and Lee Patrick will have to consider acceptable results or rescheduling.



Autumn olive (Elaeagnus umbellate):

<u>Under 5 feet</u>: During the active growing (June-September) season when translocation is occurring a foliar application will be implemented. The treatment will be applied with backpack sprayers or an AVT/Gator mounted spray rig in heavy infestations. The rate of application will be 2% glyphosate or triclopyr with the addition of a surfactant and marker dye.

<u>5 feet and taller</u>: To reduce non-target treatment from spray drift, IPC will cutand-treat the stump. This application can be performed as long as the ground is not frozen with special limitations in early spring as bud-swell and flushing begin. The stem will be cut by chainsaw or brush-cutter as close to the ground as possible not to exceed 2 inches in height. The stump will be treated immediately (within 20 seconds) with a solution of 50% glyphosate or triclopyr with the addition of a surfactant and marker dye.

# Bradford pear (Pyrus calleryana 'Bradford')

<u>Under 5 feet</u>: During the active growing (June-September) season when translocation is occurring a foliar application will be implemented. The treatment will be applied with backpack sprayers or an AVT/Gator mounted spray rig in heavy infestations. The rate of application will be 2% glyphosate or triclopyr with the addition of a surfactant and marker dye.

5 feet and taller: To reduce non-target treatment from spray drift, IPC will cutand-treat the stump. This application can be performed as long as the ground is not frozen with special limitations in early spring as bud-swell and flushing begin. The stem will be cut by chainsaw or brush-cutter as close to the ground as possible not to exceed 2 inches in height. The stump will be treated immediately (within 20 seconds) with a solution of 50% glyphosate or triclopyr with the addition of a surfactant and marker dye.

<u>Chipping</u>: All material cut will be chipped and spread out on site within two weeks of being cut.

Bush honeysuckle (Lonicera species):

<u>Under 5 feet</u>: During the active growing (June-September) season when translocation is occurring a foliar application will be implemented. The treatment will be applied with backpack sprayers or an AVT/Gator mounted spray rig in heavy infestations. The rate of application will be 2% glyphosate or triclopyr with the addition of a surfactant and marker dye.

<u>5 feet and taller</u>: To reduce non-target treatment from spray drift, IPC will cutand-treat the stump. This application can be performed as long as the ground is not frozen with special limitations in early spring as bud-swell and flushing begin. The stem will be cut by chainsaw or brush-cutter as close to the ground as possible not to exceed 2 inches in height. The stump will be treated immediately



(within 20 seconds) with a solution of 25% glyphosate or triclopyr with the addition of a surfactant and marker dye.

# Chinese Privet (Ligustrum sinensis)

<u>Under 5 feet</u>: During the active growing (June-September) season when translocation is occurring a foliar application will be implemented. The treatment will be applied with backpack sprayers or an AVT/Gator mounted spray rig in heavy infestations. The rate of application will be 2% glyphosate or triclopyr with the addition of a surfactant and marker dye.

<u>5 feet and taller</u>: To reduce non-target treatment from spray drift, IPC will cutand-treat the stump. This application can be performed as long as the ground is not frozen with special limitations in early spring as bud-swell and flushing begin. The stem will be cut by chainsaw or brush-cutter as close to the ground as possible not to exceed 2 inches in height. The stump will be treated immediately (within 20 seconds) with a solution of 25% glyphosate or triclopyr with the addition of a surfactant and marker dye.

# English ivy (Hedera helix)

Ground cover: Due to the evergreen nature of English ivy, the most optimal treatment timing will be in the dormant season of most deciduous plants. This will eliminate the possibility of non-target mortality and still perform acceptable control requirements. The treatment will be applied with backpack sprayers or an AVT/Gator mounted spray rig in heavy infestations. The rate of application will be a low volume rate of 4-5% glyphosate or triclopyr with the addition of a surfactant and marker dye.

<u>Vines ascending trees</u>: This application can be performed as long as the ground is not frozen with special limitations in early spring as bud-swell and flushing begin. The vine will be cut by lopping shears as close to the ground as possible not to exceed 2 inches in height. The stump will be treated immediately (within 20 seconds) with a solution of 25% glyphosate or triclopyr with the addition of a surfactant and marker dye.

# Japanese honeysuckle (L. japonica):

<u>Low vines</u>: Due to the semi-evergreen nature of Japanese honeysuckle, the most optimal treatment timing will be in the dormant season of most deciduous plants—particularly in late fall. This will eliminate the possibility of non-target mortality and still perform acceptable control requirements. The treatment will be applied with backpack sprayers or an AVT/Gator mounted spray rig in heavy infestations. The rate of application will be at 2% glyphosate or triclopyr with the addition of a surfactant and marker dye.

<u>Vines ascending trees</u>: This application can be preferred as long as the ground is not frozen with special limitations in early spring as bud-swell and flushing begin. The vine will be cut by chainsaw or brush-cutter as close to the ground as possible



not to exceed 2 inches in height. The stump will be treated immediately (within 20 seconds) with a solution of 25% glyphosate or triclopyr with the addition of a surfactant and marker dye.

Japanese hops (Humulus japonicus)

The treatment window for Japanese hops is narrow since it is an annual weed. Treatment should be in late-summer (Aug-Sept) before flowering. Foliar treatments of a glyphosate at 2% will be adequate to kill the plant before it has a chance to set seed.

Japanese privet (Ligustrum japonica)

<u>Under 5 feet</u>: During the active growing (June-September) season when translocation is occurring a foliar application will be implemented. The treatment will be applied with backpack sprayers or an AVT/Gator mounted spray rig in heavy infestations. The rate of application will be 2% glyphosate or triclopyr with the addition of a surfactant and marker dye.

<u>5 feet and taller</u>: To reduce non-target treatment from spray drift, IPC will cutand-treat the stump. This application can be performed as long as the ground is not frozen with special limitations in early spring as bud-swell and flushing begin. The stem will be cut by chainsaw or brush-cutter as close to the ground as possible not to exceed 2 inches in height. The stump will be treated immediately (within 20 seconds) with a solution of 25% glyphosate or triclopyr with the addition of a surfactant and marker dye

Japanese stilt grass (Microstegium vimineum):

Being an annual grass, there are two ways to approach control of *Microstegium*: (1) weed-eating or (2) chemical treatment.

<u>Weed-eating</u>: At the end of the growing season (September) as the plant is flowering cut the grass. This will eliminate the seed dispersal for the season. Follow-up treatments are essential, as the seed-bank has been reported to stay viable for over 8 years.

<u>Chemical treatment</u>: Chemical treatment would be the most efficient tool to control the spread of *Microstegium*. A grass specific chemical, such as sethoxydim, is normally recommended to control this grass, but it is not recommended to be used near water. IPC will use a rate of 2% glyphosate with addition of a surfactant and blue dye. This method can be performed 2 or 3 times during the growing season and deplete 2-3 years of seed-bank.

Johnson grass (Sorghum halepense):

Prior to seed development (June-July) when translocation is occurring a foliar application will be implemented. The treatment will be applied with backpack sprayers or an AVT/Gator mounted spray rig in heavy infestations. The rate of



application will be 2% glyphosate with the addition of a surfactant and marker dye.

Lesser celandine (Ficaria verna)

Lesser celandine is an herbaceous spring ephemeral that flowers in February and March. Once flowered, it dies back until the following spring. Therefore treatment times have a very limited window and will need to be treated with a 1% solution of Rodeo.

Mimosa (Albizia julibrissin)

<u>Under 5 feet</u>: During the active growing (June-September) season when translocation is occurring a foliar application will be implemented. The treatment will be applied with backpack sprayers or an AVT/Gator mounted spray rig in heavy infestations. The rate of application will be 2% glyphosate or triclopyr with the addition of a surfactant and marker dye.

<u>5-15 feet tall</u>: To reduce non-target treatment from spray drift, IPC will cut-and-treat the stump. This application can be administered as long as the ground is not frozen with special limitations in early spring as bud-swell and flushing begin. The stem will be cut by chainsaw or brush-cutter as close to the ground as possible not to exceed 2 inches in height. The stump will be treated immediately (within 20 seconds) with a solution of 25% glyphosate or triclopyr with the addition of a surfactant and marker dye.

<u>Large trees:</u> To reduce resprouting and non-target mortality, IPC will basal-bark larger trees. This application can be administered at any time of the year. The entire circumference of the trunk will be treated from the root collar to approximately 12 inches in height using 25% Garlon 4 and a horticultural oil. This treatment methodology will be done away from the stream bank.

Multiflora rose (Rosa multiflora):

<u>Under 5 feet</u>: During the active growing (June-September) season when translocation is occurring a foliar application will be implemented. The treatment will be applied with backpack sprayers or an AVT/Gator mounted spray rig in heavy infestations. The rate of application will be 2% glyphosate or triclopyr with the addition of a surfactant and marker dye.

5 feet and taller: To reduce non-target treatment from spray drift, IPC will cutand-treat the stump. This application can be performed as long as the ground is
not frozen with special limitations in early spring as bud-swell and flushing begin.
The stem will be cut by chainsaw or brush-cutter as close to the ground as
possible not to exceed 2 inches in height. The stump will be treated immediately
(within 20 seconds) with a solution of 25% glyphosate or triclopyr with the
addition of a surfactant and marker dye.

Porcelain berry (Ampelopsis brevipedunculata):



<u>Low vines</u>: During the active growing (June-September) season when translocation is occurring a foliar application will be implemented. The treatment will be applied with backpack sprayers or an AVT/Gator mounted spray rig in heavy infestations. The rate of application will be 2.5% triclopyr with the addition of a surfactant and marker dye.

<u>Vines ascending trees</u>: This application can be performed as long as the ground is not frozen with special limitations in early spring as bud-swell and flushing begin. The vine will be cut by chainsaw or brush-cutter as close to the ground as possible not to exceed 2 inches in height. The stump will be treated immediately (within 20 seconds) with a solution of 25% glyphosate or triclopyr with the addition of a surfactant and marker dye.

# Princess tree (Paulownia tomentosa):

<u>Under 5 feet</u>: During the active growing (June-September) season when translocation is occurring a foliar application will be implemented. The treatment will be applied with backpack sprayers or an AVT/Gator mounted spray rig in heavy infestations. The rate of application will be 2% glyphosate or triclopyr with the addition of a surfactant and marker dye.

<u>5-15 feet tall</u>: To reduce non-target treatment from spray drift, IPC will cut-and-treat the stump. This application can be administered as long as the ground is not frozen with special limitations in early spring as bud-swell and flushing begin. The stem will be cut by chainsaw or brush-cutter as close to the ground as possible not to exceed 2 inches in height. The stump will be treated immediately (within 20 seconds) with a solution of 25% glyphosate or triclopyr with the addition of a surfactant and marker dye.

<u>Large trees:</u> To reduce resprouting and non-target mortality, IPC will basal-bark larger trees. This application can be administered at any time of the year. The entire circumference of the trunk will be treated from the root collar to approximately 12 inches in height using 25% Garlon 4 and a horticultural oil. This treatment methodology will be done away from the stream bank.

# Rose of Sharon (Hibiscus syriacus):

<u>Under 5 feet</u>: During the active growing (June-September) season when translocation is occurring a foliar application will be implemented. The treatment will be applied with backpack sprayers or an AVT/Gator mounted spray rig in heavy infestations. The rate of application will be 2% glyphosate or triclopyr with the addition of a surfactant and marker dye.

<u>5 feet and taller</u>: To reduce non-target treatment from spray drift, IPC will cutand-treat the stump. This application can be performed as long as the ground is not frozen with special limitations in early spring as bud-swell and flushing begin. The stem will be cut by chainsaw or brush-cutter as close to the ground as possible not to exceed 2 inches in height. The stump will be treated immediately



(within 20 seconds) with a solution of 25% glyphosate or triclopyr with the addition of a surfactant and marker dye.

# Tree-of-heaven (Ailanthus altissima):

<u>Under 5 feet</u>: During the active growing (June-September) season when translocation is occurring a foliar application will be implemented. The treatment will be applied with backpack sprayers or an AVT/Gator mounted spray rig in heavy infestations. The rate of application will be 2% glyphosate or triclopyr with the addition of a surfactant and marker dye.

<u>5-15 feet tall</u>: To reduce non-target treatment from spray drift, IPC will cut-and-treat the stump. This application can be administered as long as the ground is not frozen with special limitations in early spring as bud-swell and flushing begin. The stem will be cut by chainsaw or brush-cutter as close to the ground as possible not to exceed 2 inches in height. The stump will be treated immediately (within 20 seconds) with a solution of 50% glyphosate or triclopyr with the addition of a surfactant and marker dye.

Large trees: To reduce resprouting and non-target mortality, IPC will basal-bark larger trees. This application can be administered at any time of the year. The entire circumference of the trunk will be treated from the root collar to approximately 12 inches in height using 25% Garlon 4 and a horticultural oil. This treatment methodology will be done away from the stream bank.

# Winter creeper (Euonymus fortunei):

Ground cover: Due to the evergreen nature of winter creeper, the most optimal treatment timing will be in the dormant season of most deciduous plants. This will eliminate the possibility of non-target mortality and still perform acceptable control requirements. The treatment will be applied with backpack sprayers or an AVT/Gator mounted spray rig in heavy infestations. The rate of application will be a low volume rate of 4-5% glyphosate or triclopyr with the addition of a surfactant and marker dye.

<u>Vines ascending trees</u>: This application can be performed as long as the ground is not frozen with special limitations in early spring as bud-swell and flushing begin. The vine will be cut by lopping shears as close to the ground as possible not to exceed 2 inches in height. The stump will be treated immediately (within 20 seconds) with a solution of 25% glyphosate or triclopyr with the addition of a surfactant and marker dye.

# **DISPOSAL RECOMMENDATIONS**

All large debris will be chipped on-site and spread out to eliminate piling.



# **EDUCATIONAL EFFORTS**

IPC understands the importance of good communications with the citizenry of Greensboro. IPC staff is always available to communicate the scenario in a professional and yet easy to understand language to the community. All IPC staff are college trained individuals that have training in natural resources and can provide detailed information to Greensboro citizenry concerning the rehabilitation efforts. In order to provide a level of acceptance and understanding, IPC will provide movable signage explaining the management of the vegetation along the riparian corridor.

IPC, in addition to City provided educational material, can distribute literature concerning invasives and websites for those interesting in the subject.

IPC is available to do a presentation/workshop for the City employees so that once the management is in the later stages; in-house staff can be handed over the job.

# **Deliverables**

Before the June 2015 scheduled chemical application, IPC will provide a brief Quality Assurance/Quality Control plan to the contracting officer representative. This plan will be discussed and approved by both parties before treatment is administered. IPC will also provide "Daily Site Sheets" (see Appendix A) utilizing IPCConnect. IPCConnect is an online data system that enables the Greensboro Water Resources Department to have real time notes on the sites IPC is currently working. A final report will be issued upon the completion of the project. These reports will advise Water Resources of the personnel, the number of hours at the site, the methodologies performed (pruning, invasive plant control, chipping), chemicals used and the amounts.

Upon completion of the project there will be an 85% mortality rate on the invasive pest plants treated. (IPC is not responsible for *seed germination* of invasive pest plants after year two treatment). Constant and continual monitoring is essential due to the availability of seeds that will be dispersed by water flow, animal dispersion, and weather.

Also, there will be dead vines hanging from certain trees that were cut but not pulled from the tree. This is due to the nature of the vines IPC will be controlling, by pulling the vines out of the trees more damage will be done to the branches and limbs than would be acceptable. The vines will be left to decay and can eventually be pulled out if necessary on later dates by volunteers or in-house staff.



# **Project Team and Project Management**

# **Invasive Plant Control, Inc.**

Steve Manning, President Lee Patrick, Vice President Martin Clark, Regional Supervisor Seth Conner, Team Lead Joe Kolar, Team Lead

(Please see attached resumes and proof of pesticide applicator certifications in Appendix B).

The project team will consist of **Steve Manning**, who will be in charge of all the administrative business concerning accounts receivable and legalities. He will be the person to sign the contract. **NC Ground Pesticide Applicator (Cat. H)** # 026-23764

Lee Patrick is in charge of the operations of IPC throughout the country and will be the setting up operations for the Stream Corridor Restoration Project. Lee Patrick will be responsible for the deliverables to be completed in a timely, organized, and acceptable manner. NC Ground Pesticide Applicator (Cat. A) # 026-22721

Martin Clark will be the Regional Supervisor and will be the immediate contact person. He will be responsible for scheduling and advising the contracting officer of future plans. Martin will be in charge of the crew and will insure that the results are satisfactory with the officer and the general public. NC Ground Pesticide Applicator (Cat. H) # 026-23764

Joe Kolar is an IPC Team Leader and will be acting as an alternate Team Lead/Technician. NC Ground Pesticide Applicator (Cat. H) # 026-32798

**Seth Conner** is an IPC Team Leader and will be acting as an alternate Team Lead/Technician. **NC Ground Pesticide Applicator (Cat. H) # 026-32797** 

Vegetative Maintenance Services Associated with the Stream Corridor Restoration Project

# **MWBE Good Faith Efforts:**

Invasive Plant Control, Inc. (IPC) has made a good faith effort to seek out a MWBE subcontractor to do chipping on the cut material on the 24.4 acres of new management sites. According to <a href="http://www.cityofws.org/Portals/0/pdf/mwbe/WS%20MWBE%20Directory%20October\_2013.pdf">http://www.cityofws.org/Portals/0/pdf/mwbe/WS%20MWBE%20Directory%20October\_2013.pdf</a> there are no MWBE in or near Winston Salem, NC and the surrounding area that does tree care and tree disposal. IPC also looked for a chemical distributor to provide chemical for the project and found no MWBEs.

IPC, as a small business, is usually the subcontractor and has had no need to subcontract any work out. Therefore, IPC has not been able to document past achievements in obtaining subcontractor diversity on similar projects.



# References

David Phlegar
City of Greensboro
2602 S. Elm-Eugene St
Greensboro, NC 27406-3623
David.Phlegar@ci.greensboro.nc.us (336) 373-2707

Karen Hall Riparian Vegetation Specialist NCSU Water Quality Group Campus Box 7637 Raleigh, NC 27695 Karen\_hall@ncsu.edu (919) 515-8242

Charles Smith, Project Manager II
Fairfax County Department of Public Works and Environmental Services
Stormwater Planning Division
12000 Government Center Parkway, Suite 449
Fairfax, VA 22035
703-324-2467
Charles.Smith@fairfaxcounty.gov

Other references upon request.

		Chart 1: Cost Est	mater	OI 33 Faiks			
Task	Year 1 (1 Treatment)	Year 2	Year 3	3	Year 4	Cost per	
	# Man-hours/ac	# Man-hours/ac	# Ma	n-hours/ac	#Man-hours/ac	Man-h	our (\$)
Spraying twice per/yr	4		8	8	3	\$	77.41
Cut and treat	0		0	0	(	\$	77.41
Chipping	0		0	0	(	\$	77.41
Education	0.05	0.0	)5	0.05	0.05	\$	77.41
Total # of Man-hours	4.05	8.0	)5	8.05	8.05	5	
						Total L	ump Sum\$
Total \$ per year	\$ 17,277.56	\$ 34,341.8	2 \$	34,341.82	\$ 34,344.94	\$	120,306.15
Task	Year 1 (1 Treatment) # Man-hours/ac	# Man-hours/ac	Year 3		Year 4 #Man-hours/ac	Cost per Man-hour (\$)	
	stimate for Gillesp						
	# Man-hours/ac	# Man-hours/ac	an-hours/ac # Man-hours/ac		#Man-hours/ac		
Spraying twice per/yr	4		3	2	1.5	\$	77.41
Cut and treat	12		1	0.5	0.025	\$	77.41
Chipping	4		1	0	0.05	\$	77.41
Education	0.5	0.	1	0.1	0.05	\$	77.41
Total # of Man-hours	20.5	5.	1	2.6	1.625		
						Total L	ump Sum\$
Total \$ per year	\$ 54,748.22	\$ 27,240.58	3 \$	13,887.35	\$ 8,679.60	\$	104,555.75
Ch	art 3: Cost Estimat	te for Union & Gr	een Hill	Cemetery a	nd Farmers Mar	ket	
Task	Year 1 (1 Treatment)	Year 2	Year 3		Year 4	Cost pe	er
	# Man-hours/ac	# Man-hours/ac	# Ma	n-hours/ac	#Man-hours/ac	Man-ho	our (\$)
Spraying twice per/yr	14	1	.7	17	17	\$	77.41
Cut and treat	0		0	0	C		77.41
Chipping	0		0	0	C		77.41
Education	0.05	0.0	5	0.05	0.05	\$	77.41
Total # of Man-hours	14.05	17.0	5	17.05	17.05		
						Total L	ımp Sum\$
					\$ 1,451.82	\$	



# Appendix A (Daily Site Sheet)

# **Greensboro Stream Corridors**

**Contact Name:** 

Peter Schneider

Address:

Phone:

3363732737

**Record Date:** 

Oct 2, 2014

Time:

7:00 AM - 6:00 PM

**Total Man Hours:** 

22

**Area Treated:** 

27.4847663325 acres

**Density:** 

Light 1 2 3 4 5 Dense

Slope:

Flat 1 2 3 4 5 Steep

Notes:

Other = prep/mixing

Shannon Woods, Shannon Hills, Greenhaven, Rolling Roads, Greentree,

Hannaford, Woodlea, Hampton

AM

**PM** 

**Temperature** 

65°F

83°F

**Sky Conditions** 

Partly Cloudy

**Wind Conditions** 

1-5 mph

6-10 mph

# **Crew Members**

	Hours	<b>Certification Num</b>
Martin Clark (Leader)	11	026-23764
Vance Brown	11	



# **Methods Used**

Foliar - ATV/UTV

Foliar - Backpack Sprayer

# **Species Treated**

Asiatic dayflower

autumn olive

big periwinkle

bush honeysuckles (exotic)

Callery pear (Bradford pear)

Chinese holly

Chinese privet

Chinese wisteria

Chinese yam

English ivy

glossy privet

Japanese honeysuckle

Japanese hop

johnsongrass

mimosa

monkeygrass

morning glory

mugwort

mullein

multiflora rose

nandina

oriental bittersweet

Oriental lady's thumb

perilla mint

porcelain-berry

purple crown-vetch

rose of Sharon

sericea lespedeza

sweet autumn virginsbower

# **Chemicals Used**

EPA#	Brand Name	Total Solution	Rate	% Solution	Surfactant	Dye
62719-37	Garlon 3A	1 pints		25		Bullseye
42750-61-72693	Gly-4 Plus	200 gal		2		Bullseye
42750-60	Glystar Original	1 gal		5	Attach	Bullseye

# **Polygons**

- 3.27822 acres or 142,799 sq feet @ ~ (36.04962, -79.765505)
  - 1.11798 acres or 48,699 sq feet @ ~ (36.01983, -79.79053)
- 9.54493 acres or 415,777 sq feet @ ~ (36.015565, -79.815175)
- 3.22176 acres or 140,340 sq feet @ ~ (36.018265, -79.831935)
- 0.95582 acres or 41,635 sq feet @ ~ (36.025125, -79.82878)
- 9.36604 acres or 407,985 sq feet @ ~ (36.036015, -79.831165)





# Appendix B (Resumes)



# AUBREY LEE PATRICK

PO Box 50556 \* Nashville, TN 37205

(615) 812-5313 work

Objective

To be recognized as the foremost Global authority on invasive species

# **EDUCATION**

Bachelor of Science in Biology with a minor in Education, 1990 East Tennessee State University

Graduate level dendrology studies, 1996 Vanderbilt University

Wildland Fire Behavior S290/S390, 1998

CPR Certified, 1992-present

# PROFESSIONAL EXPERIENCE

Invasive Plant Control, Inc.

1997-present

## Owner & Vice President

- The foremost specialist on invasive plants in the United States
- Developed and implemented integrated pest management plans for the implementation of exotic plant control projects and native plant restoration in greater than 100 sites across the United States
- Developed proposals, bids, project documentation, and end of project reports for exotic plant management
- Responsible for supervision, logistics, safety, and evaluating efficient work practices
- Present safety, methodology and industry specific information at numerous industry and public symposiums
- Other responsibilities include research, mapping, vegetation inventories, monitoring, and sundry administrative duties. Equipment operation includes chainsaws, brushcutters, backpack & skid sprayers, tractor, and chipper.

## Warner Park Nature Center

1994-1997

# Resource Management Specialist

- Performed supervisory, administrative, and professional duties of natural resource related facilities, programs, and staff
- Directed, implemented, and evaluated park research and management projects (including a 6 year vegetation survey, exotic plant control and management)
- Planned, supervised, and performed environmental education/recreational programs.

# Bays Mountain State Park

1992-1994

## Ranger/Naturalist

Interpreted and communicated educational resources of the park

# Winged-Deer Park

1993



# **NATURALIST**

Interpreted and communicated educational resources of the park

# Utah Division of Wildlife Resources

1991-1992

Fisheries Technician

- Participated in research to determine sport-fishing pressure on the Flaming Gorge/Green River Project
- Conducted fish population estimates by electro-shocking, seining, and trend-netting
- Maintained fisheries equipment, entered data, and wrote reports

# Utah Division of Wildlife Resources

1990-1991

FISHERIES TECHNICIAN

- Conducted fish population surveys using creel census, gill/trend netting, electro-shocking, trawling, and seining techniques
- Participated on the Strawberry Reservoir Eradication Project; which included using explosives to breach beaver dams, administering Rotenone, and regulating a de-toxification station in part to control exotic fish species

# **Organizational Involvement**

# TENNESSEE EXOTIC PEST PLANT COUNCIL 1994-2002, 2006

**Board Member** 

- In charge of Non-Profit Corporation's accounting for 4 years
- Instrumental in development of native plant by regions brochures

# TENNESSEE RECREATION & PARKS ASSOCIATION 1994-2002

Board Member & Legislative Committee Chair

- Presenter at several workshops & symposiums
- Leadership development institute graduate
- Helped develop TN Invasive Plant Guidelines brochure

# SOUTHEAST EXOTIC PEST PLANT COUNCIL 1998-2002, 2006-2008

Treasurer

 Acting treasure for this newly established regional organization dedicated to controlling exotic pests

# TENNESSEE VEGETATION MANAGEMENT ASSOCIATION

1999-PRESENT

Board Member

# Licenses and Certifications

# CERTIFIED IN RIGHT OF WAYS, LAWN AND TURF, AQUATIC



# MARTIN W. CLARK

**EMPLOYMENT** 

April 2004 -Inc. Invasive Plant Control,

Vegetation Management Specialist

- Supervision of personnel and work closely with clientele to accomplish above satisfactory results.
- This position includes the hands-on control and removal of invasive non-native plants. Experience has been mostly focused on problem plants, shrubs, forbs, grasses, and trees in the southeastern United States. Skills and responsibilities include:
- The proper identification of non-native species in comparison to native and desirable plants on designated sites.
- Proper use and care of tools such as chainsaws, brush-cutters, weed wrench, backpack sprayers, and various broadcast herbicide sprayers.
- The proper use and choice of various herbicides, selective and non-selective to control undesirable plants.

2000 – April 2004

University of Tennessee

Parking Attendant-Special Events

Collection of parking fees for special events.

2001 – 2003 Varmint Busters

Knoxville, TN

Wildlife Technician

- Managed workload of 8 12 individual wildlife damage control problems.
- Trapped and relocated wide variety of nuisance wildlife.
- Maintained daily communication with customers.
- Maintained and serviced company vehicle and equipment.

Summer 2001 University of Tennessee

Knoxville, TN

Wildlife Technician

- Assisted graduate student with habitat evaluation of Grouse nesting and feeding sites in Western North Carolina.
- Assisted in radio-telemetry location of radio tagged Grouse.
- Collected invertebrate samples at nesting and feeding sites.



• Participated in GPS mapping of nesting and feeding sites.

Summer 2000 U.S. Fish and Wildlife Service Wildlife Technician/Intern

Creswell, NC

- Operated rocket nets to capture and band Wood ducks.
- Constructed and maintained Wood duck nesting boxes.
- Maintained records of banding information.
- Captured and banded juvenile Terns.
- Captured and banded Brown pelicans and Canada Geese.

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$\mathbf{F}$	$\mathbf{D}$	H	C	4	$\Gamma T$	()	N

2003 -- Current Roane State Community College Criminal Justice

Oak Ridge, TN

Predicted graduation date of December 2004

1999 – 2001 University of Tennessee

Knoxville, TN

Bachelor of Science in Wildlife and Fisheries Science

1995 – 1999 Pellissippi State Community College

Knoxville, TN

Associate of Science in Biology

## **SKILLS**

- Experienced in the operation of 4 wheel drive vehicles and ATVs
- Knowledgeable in the safe use and operation of chainsaws, lawn care equipment and bladed cutting implements.
- Experienced in the use of GPS equipment.
- Trained in techniques of habitat manipulation to meet the needs of a variety of wildlife species.
- Experienced in the safe use and handling of a variety of rodenticides.
- · Experienced in the reading of topographical maps.



# Joseph A. Kolar

10418 Tullymore Dr., Adelphi MD 20783 (301) 452-0547

joseph.a.kolar@gmail.com

Work Experience

**Invasive Plant Control Inc.** 

Crew Leader

Fairfax, VA

August 2013 to Present

- Managing work crews of up to five people at a time on invasive plant treatment and removal projects.
- Planned projects with different government clients to work on public lands, identifying and removing invasive, non-native plants.
- Duties included the safe handling, storage and application of hazardous chemicals, the use of back pack sprayers, machetes, chainsaws, ATVs, and other tools and vehicles.
- Addressed any additional responsibilities as they arose.

**Student Conservation Association** 

Program Leader, Visitor Use Surveys

Oxford, MS

April to September 2012

- Organized and managed team of five interns for summer session in administering and collection visitor use data for the Army Corps of Engineers at lakes in northern Mississippi.
- Organized, scheduled, and carried out weekly conservation projects and team building activities.
- Managed day to day affairs of interns, including finding and providing housing, providing utilities, renting vehicles and acquiring equipment, balancing team budget, etc.

**Student Conservation Association** 

Program Leader, High School Trail Crew

Rosalyn, VA

March to August 2011

- Led a group of high school students on a summer session of trail maintenance and outdoor work, including the design and construction of water bars, retaining walls, and fences, among other things.
- Identified and cleared invasive plants, collected litter, cut brush and deadfall, and generally maintained the health and safety of city park trails.
- Administered lessons on Environmental Education, Job Readiness, and Green Jobs according to SCA generated curriculum.

The Close Up Foundation

Program Instructor

Washington, DC

November 2009 to March 2010

- Ran workshops and programs that brought high school students from around the country to Washington DC in order to get them involved in politics.
- Taught government, civics, and American History.
- Managed the logistics of transporting students around the city to various monuments and locations, including facilitating meetings with US Senators and Representatives.



# **Groundwork Bridgeport**

Community Organizer and Team Builder

**Bridgeport, CT**August 2008 to August 2009

- Organized and carried out monthly environmental community service projects by recruiting volunteers from community organizations (schools, universities, churches, etc.), secured funding, coordinated transportation, etc.
- Worked alongside volunteers and laborers to maintain and care for public landscapes and the lawns of elderly homeowners.
- Wrote and edited the Groundwork Bridgeport's quarterly newsletter the GroundBreaker. Also led and carried out the move to a paperless, all-online, bi-monthly distribution system.
- Updated and maintained the website (groundworkbridgeport.org).
- Performed clerical work in the office, such as researching and applying for grants, networking with other community organizations, etc.
- Served Groundwork Bridgeport for one year as part of the Jesuit Volunteer Program, in which I lived in an impoverished neighborhood and served the community at a reduced salary.

# oyola College Biology Department

Baltimore, MD

Laboratory Assistant

September 2004 to May 2008

- Cleaned laboratories and prepared experiments for students and professors.
- Fed, cleaned, and cared for small animals.
- Tended and cared for various species of exotic plants.
- Handled and secured harmful substances.

# **Teaching Internship Experience**

Lansdowne Middle School

Social Studies Teaching Intern

Lansdowne, MD

August to October 2007

- Assisted the homeroom teacher by preparing and teaching 8<sup>th</sup> grade Social Studies lessons.
- Graded tests and student work.

# Catonsville High School

Teaching Intern

Catonsville, MD

October to December 2007

- Assisted high school teacher by preparing and teaching lessons for three classes (Sophomore World History, A.P. European History, Honors Philosophy).
- Created assignments and tests and graded student work.

Maryland Educator Certificate issued by State Superintendent of Schools

Valid July 2008 to June 2013



# **Education & Honors**

# Loyola College in Maryland

Baltimore, MD

May 2008

- Bachelor Degree in History
- Minor in Secondary Education
- Cumulative GPA: 3.468
- Member of Honors Program
- Won 2006 Honors Program Essay Contest
- Recipient of ETS Recognition of Excellence Reward for the Social Studies: Content Knowledge Praxis Test

# Invasive Plant Control

# **Seth M Conner**

# **SKILLS**

- Field & Lab Identification
  - Native & Invasive species of Eastern Deciduous/Northern Hardwood Forests
  - Dichotomous keys & Botanical identification guide experience
- Leadership
  - Problem solving
  - Organization
  - Empathy
- Operation/Maintenance of Natural Resources Equipment
  - Backpack/hand sprayers
  - Chainsaws, machetes
  - Dual-reel sprayer
  - Trailers
- Data Collection/Data Entry
  - Vegetative sampling (quadrats & transects)
  - Meticulous record keeping
  - Organization of information through Microsoft Excel
- Map Reading & Interpretation
  - Compass utilization
  - Introductory knowledge of GPS units
- Physical Fitness
  - Able to lift at least 50 lbs.
  - Unhindered by inclement weather conditions

# **CERTIFICATIONS**

- Virginia Department of Agriculture & Consumer Services
  - Certified Pesticide Applicator (#130993-C)
  - Category 6: Right of Way
- North Carolina Department of Agriculture & Consumer Services
  - Ground Applicator (#026-32797)
  - Category H: Right of Way
- American Red Cross
  - Adult First Aid/CPR/AED Certified
- ATV Safety Institute
  - Card #2511920



# FIELD EXPERIENCE

Invasive Plant Control, Inc. - Crew Leader

- Trained incoming technicians in identification techniques as well as equipment/herbicide handling methods
- Lead technicians as a certified herbicide applicator
- Operated and performed light maintenance on chainsaws
- Handled backpack sprayers along with a dual reel sprayer
- Operated company vehicles while frequently towing trailers
- Handled glyphosate and triclopyr for foliar/cutting treatments

U.S. Forest Service - Internship (Wayne National Forest)

- Grid-mapped to estimate the elevation of a designated area, formulating topographic maps and creating vernal pool designs
- Compounded a seed mix to re-vegetate an acid mine reclamation site and preparing seed germination trays
- Conducted vegetative sampling using quadrat frames
- Performed invasive species removal through chemical & mechanical application
- Participated in frog & toad call count surveys
- Compiled data using Microsoft Excel
- Constructed owl & bird boxes

Appalachian Ohio Weed Control Project - Volunteer

- Surveyed ~5 miles of the Hocking River for purple loosestrife (*Lythrum salicaria*)
- Photographed and plotted GPS points of populations

# WORK EXPERIENCE

Invasive Plant Control,

Inc. - Crew Leader

May 2014-Present

- Leading 2-4 person crews
- Maintaining equipment
- Identifying native and non-native species
- Recording daily herbicide usage and methods

# **EDUCATION**

Hocking College

Associate of Applied Science in Wildlife Resources

Management (2013) GPA: 3.214

Chillicothe High School Diploma (2007)

GPA: 3.7



# Appendix C (NC Certifications)

NORTH CAROLINA DEPARTMENT OF AGRICULTURE & CONSUMER SERVICES

STEVE TROXLER, COMMISSIONER

LICENSE / CERTIFICATE

By Authority of the NC Pesticide Board

026-18018

LICENSE/CERTIFICATE NO.

STATUTE GS 81, 106, 119 CLASSIFICATION

NOT TRANSFERABLE

**EXPIRATION DATE** 

026-Ground Pesticide Applicator

12/31/2015

Categories:

0

MANNING STEVEN T.

LICENSEE

INVASIVE PLANT CONTROL, INC.

P.O. BOX 50556

NASHVILLE

CERTIFICATOR

Z





THIS LICENSE/CERTIFICATE MAY BE SUBJECT TO REVOCATION OR SUSPENSION AS PROVIDED BY LAW.

1. Cut this ID card along the dotted lines and fold.

Categories Held:

Category Codes

A. Aquatic

INSTRUCTIONS

- Keep this card in your possession at all times. 2. LAMINATE THE CARD E. Core B. Public Health
- G. Forest

N. Demo. and Research M. Seed Treatment K. Ag. Pest Animal

Ornamental and Turf

Ag. Pest Plant

- H. Right of Way
- Present this applicator ID card

4. Present this application at all training sessions.

back

Education Credits must be earned by: 06/30/2015

PESTICIDE APPLICATOR IDENTIFICATION NORTH CAROLINA PESTICIDE BOARD

NCDA & CS

Ground Applicator

License No. 026-18018

MANNING, STEVEN T.



LICENSE EXPIRATION DATE: 12/31/2015

Fold this flap inside first.

Please laminate this card.

MANNING, STEVEN T



5. Pesticide Section (919) 733-3556

P.O. BOX 50556 INVASIVE PLANT CONTROL, INC MANNING, STEVEN T.

NASHVILLE

Z 37205

# INSTRUCTIONS

- Cut this ID card along the dotted lines and fold.
- 2. LAMINATE THE CARD
- 3. Keep this card in your possession at all times.
- 4. Present this applicator ID card at all training sessions.
- Pesticide Section (919) 733-3556

P.O. BOX 50556

NASHVILLE

Z

37205

INVASIVE PLANT CONTROL, INC.

PATRICK, AUBREY

Education Credits must be earned by:

Categories Held:

# Category Codes

- B. Public Health
- E. Core
- l. Regulatory H. Right of Way G. Forest
- Seed Treatment Ornamental and Turf Ag. Pest Animal
- N. Demo. and Research Ag. Pest Plant
- Wood Treatment

06/30/2019

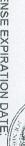
NORTH CAROLINA PESTICIDE BOARD NCDA & CS

**Ground Applicator** 

PESTICIDE APPLICATION IDENTIFICATION

License No. 026-22721

PATRICK, AUBREY



LICENSE EXPIRATION DATE: 12/31/2015

Fold this flap inside first

Please laminate this card

PATRICK, AUBREY



NOT TRANSFERABLE

STATUTE GS 81, 106, 119

CLASSIFICATION

026-Ground Pesticide Applicator 12/31/2015

Categories

**EXPIRATION DATE** 

D

PATRICK, AUBREY

OR LICENSEE

P.O. BOX 50556

INVASIVE PLANT CONTROL, INC.

CERTIFICATOR

NASHVILLE

Z

37205

LICENSE/CERTIFICATE NO

NORTH CAROLINA DEPARTMENT OF AGRICULTURE & CONSUMER SERVICES

STEVE TROXLER. COMMISSIONER LICENSE / CERTIFICATE

By Authority of the NC Pesticide Board

026-22721



STEVE TROXLER, COMMISSIONER

THIS LICENSE/CEF IFICATE MAY LE SUBJECT TO REVOCATION OR SUSPENSION AS PROVIDED BY LAW.

# INSTRUCTIONS

- 1. Cut this ID card along the dotted lines and fold.
- 2. LAMINATE THE CARD.
  - 3. Keep this card in your possession at all times.
- 4. Present this applicator ID card at all training sessions. 5. Pesticide Section

(919) 733-3556

N. Demo. and Research L. Ornamental and Turf M. Seed Treatment T. Wood Treatment O. Ag. Pest Plant Right of Way I. Regulatory G. Forest E. Core



back

37205

Z

INVASIVE PLANT CONTROL, INC.

CLAPK

PO BOX 50556

NASHVILLE

06/30/2015

Education Credits must be earned by: Categories Held: HR

K. Ag. Pest Animal Category Codes

A. Aquatic B. Public Health

NORTH CAROLINA PESTICIDE BOARD

PESTICIDE APPLICATOR IDENTIFICATION **Ground Applicator** 

026-23764

License No.

CLARK, MARTIN W.



Fold this flap inside first.

Please laminate this card.

CLARK, MARTIN W.

STEVE TROXLER, COMMISSIONER

Z

37205

THIS LICENSE/CERTIFICATE MAY BE SUBJECT TO REVOCATION OR SUSPENSION AS PROVIDED BY LAW.

INVASIVE PLANT CONTROL, INC. PO BOX 50556

OR.

LICENSEE

CERTIFICATOR

NASHVILLE

CLARK, MARTIN W.

MER SERVIN

Categories:

エス

**EXPIRATION DATE** 

CLASSIFICATION

12/31/2015

026-Ground Pesticide Applicator

STATUTE GS 81, 106, 119 NOT TRANSFERABLE

By Authority of the NC Pesticide Board

NORTH CAROLINA DEPARTMENT OF AGRICULTURE & CONSUMER SERVICES STEVE TROXLER, COMMISSIONER

026-23764

LICENSE/CERTIFICATE NO.

LICENSE / CERTIFICATE

NORTH CAROLINA DEPARTMENT OF AGRICULTURE & CONSUMER SERVICES

STEVE TROXLER, COMMISSIONER LICENSE / CERTIFICATE

By Authority of the NC Pesticide Board

026-32797

LICENSE/CERTIFICATE NO.

STATUTE GS 81, 106, 119 NOT TRANSFERABLE

**EXPIRATION DATE** CLASSIFICATION

026-Ground Pesticide Applicator

12/31/2015

Categories

エス

INVASIVE PLANT CONTROL INC CONNER, SETH M.

OR.

LICENSEE

PO BOX 50556 NASHVILLE

CERTIFICATOR

Z 37205



STEVE TROXLER, COMMISSIONER

THIS LICENSE/CERTIFICATE MAY BE SUBJECT TO REVOCATION OR SUSPENSION AS PROVIDED BY LAW

# NSTRUCTIONS

dotted lines and fold. 1. Cut this ID card along the

Categories Held: HR

Category Codes

E. Core

Keep this card in your possession at all times.

2. LAMINATE THE CARD

G. Forest

N. Demo. and Research T. Wood Treatment

Seed Treatment Ornamental and Turf Ag. Pest Animal

B. Public Health A. Aquatic

- H. Right of Way
- 4. Present this applicator ID card at all training sessions.
- 5. Pesticide Section (919) 733-3556

INVASIVE PLANT CONTROL INC CONNER, SETH M.

back

PO BOX 50556

NASHVILLE

Z 37205 Education Credits must be earned by: 06/30/2016

PESTICIDE APPLICATOR IDENTIFICATION NORTH CAROLINA PESTICIDE BOARD NCDA & CS

**Ground Applicator** 



CONNER, SETH M.

License No.

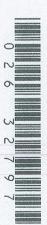
026-32797

LICENSE EXPIRATION DATE: 12/31/2015

Fold this flap inside first.

Please laminate this card

CONNER, SETH M.



NORTH CAROLINA DEPARTMENT OF AGRICULTURE & CONSUMER SERVICES

STEVE TROXLER, COMMISSIONER

LICENSE / CERTIFICATE

By Authority of the NC Pesticide Board

LICENSE/CERTIFICATE NO.

026-32798

STATUTE GS 81, 106, 119 NOT TRANSFERABLE

**EXPIRATION DATE** CLASSIFICATION

026-Ground Pesticide Applicator

12/31/2015

IR

Categories:

KOLAR, JOSEPH

LICENSEE

INVASIVE PLANT CONTROL INC

NASHVILLE PO BOX 50556

CERTIFICATOR

ĭ 37205



STEVE TROXLER, COMMISSIONER

THIS LICENSE/CERTIFICATE MAY BE SUBJECT TO REVOCATION OR SUSPENSION AS PROVIDED BY LAW

# INSTRUCTIONS

dotted lines and fold. 1. Cut this ID card along the

2. LAMINATE THE CARD

- G. Forest E. Core
- possession at all times. Keep this card in your
- 4. Present this applicator ID card at all training sessions.
- 5. Pesticide Section (919) 733-3556

Education Credits must be earned by:

06/30/2016

Categories Held: HR

- Category Codes A. Aquatic
- B. Public Health K. Ag. Pest Animal Ornamental and Turf

**Ground Applicator** 

PESTICIDE APPLICATOR IDENTIFICATION NORTH CAROLINA PESTICIDE BOARD

License No.

NCDA & CS

- Seed Treatment
- N. Demo. and Research
- H. Right of Way

  I. Regulatory O. Ag. Pest Plant
  T. Wood Treatment

KOLAR, JOSEPH



LICENSE EXPIRATION DATE:

Please laminate this card. Fold this flap inside first.

KOLAR, JOSEPH



INVASIVE PLANT CONTROL INC KOLAR, JOSEPH

PO BOX 50556

NASHVILLE

I 37205