



LIMITS OF LIABILITY AND DISCLAIMER OF WARRANTY

© 2014 by the National Apartment Association, 4300 Wilson Boulevard Suite 400 Arlington, VA 22203. All rights reserved. The course materials or any part thereof may not be reproduced, stored in a retrieval system, or transmitted, in any form or by any means—graphic, electronic, or mechanical, including photocopying, recording, or otherwise, without the prior written permission of the National Apartment Association Education Institute (NAAEI).

NAA retains copyright to the original materials and to any translation to other languages and any audio or video reproduction, or other electronic means, including reproductions authorized to accommodate individual requests based on religious or medical deferments from classroom participation.

DISCLAIMERS

Although NAAEI programs provide general information on apartment management practices, NAAEI does not guarantee the information offered in its programs is applicable in all jurisdictions or that programs contain a complete statement of all information essential to proper apartment management in a given area. NAAEI, therefore, encourages attendees to seek competent professional advice with respect to specific problems that may arise. NAAEI, their instructors, agents, and employees assume no responsibility or liability for the consequences of an attendee's reliance on and application of program contents or materials in specific situations. Though some of the information used in scenarios and examples may resemble true circumstances, the details are fictitious. Any similarity to real properties is purely coincidental. Forms, documents, and other exhibits in the course books are samples only; NAAEI does not necessarily endorse their use. Because of varying state and local laws and company policies, competent advice should be sought in the use of any form, document, or exhibit.

POLICY STATEMENT REGARDING THE USE OF RECORDING DEVICES, AUDIO VISUAL EQUIPMENT, AND OTHER MEANS OF REPRODUCTION OR RECORDING OF THE "CERTIFIED APARTMENT MANAGER" MATERIALS

All program contents and materials are the property of the National Apartment Association Education Institute, which strictly prohibits reproduction of program contents or materials in any form without the prior written consent. Except as expressly authorized in writing in advance, no video or audio recording of NAAEI programs or photocopying of "Certified Apartment Manager" materials is permitted. Authorized recording of programs or duplication of materials may be done only by the instructor on site.



ACKNOWLEDGMENTS

SUBJECT MATTER EXPERTS

The NAA Education Institute wishes to thank the following apartment industry professionals for contributing their time and expertise to the rewrite of the Certified Apartment Manager Research, Analysis and Evaluation program:

Lead Subject Matter Expert

Susan E. Weston, CAM CAPS, NAAEL Faculty
Licensed Texas Broker

Professor, University of North Texas School of Business

The Susan Weston Company
2655 Mount View Drive
Dallas, TX 75234-6239
972.308.6092 Office
972.415.6299 Cell
susan@susanweston.com

www.susanweston.com

KEY CONTRIBUTORS

- David Jolley, CAMT
- Howard L. Campbell, Ph.D.
- Fisher & Phillips, LLP
- Kimball, Tirey, and St. John, LLP
- Sue Weston, CAM, CAPS

Property Maintenance for Managers

Table of Contents

Chapter 1: Maintenance Using a Team Approach	1-1
Chapter Overview	
Overview of Maintenance	
Developing a Team Approach	
Simple Repairs Anyone Can Do	1-7
Chapter 2: The Onsite Manager's Role	2-1
Chapter Overview	
A Property Manager's Responsibilities	2-2
Setting High Quality Standards	2-3
Hiring Maintenance Personnel	2-4
Assigning and Evaluating Work	2-7
Using a Contractor	
The Bidding Process	2-13
The Contract	2-15
Vendor Management	2-18
Chapter 3: Exterior Maintenance	3-1
Chapter Overview	3-1
Elements of Exterior Maintenance	3-2
Property Inspections	3-3
Common Area Maintenance Checklist	3-4
Building Maintenance Checklist (Exterior)	3-8
Chapter 4: Interior Maintenance Chapter Overview	4-1
Chapter Overview	4-1
Elements of Interior Maintenance	
Make-Ready Maintenance	4-3
Unit Interior Maintenance Checklist	4-6
Building Maintenance Checklist (Interior)	
Managing Inventory	4-15
Chapter 5: Preventive Maintenance	5-1
Chapter Overview	5-1
Overview of Preventive Maintenance	5-2
Developing a Preventive Maintenance Program	5-4
Assigning Personnel to Complete the Work	5-7
Monitoring the Preventive Maintenance Program	
Conservation	5-10
Green Property Management	5-12
Toolbox	Toolbox-1
Overview	
Maintenance Skills Checklist	Toolbox-14
Periodic Services Agreement Between Owner and Service Provider	Toolbox-16

Continued on next page

i

Table of Contents, Continued

Service Agreement Between Owner and Contractor	Toolbox-24
Asphalt Sealcoat Specifications	Toolbox-32
Parking Area Striping Specifications	Toolbox-35
Sample Service Request Form	Toolbox-36
Sample Service Request Summary	Toolbox-37
Sample Certificate of Insurance	Toolbox-38
Sample Property Inventory Form	Toolbox-39
Sample Preventive Maintenance Schedule	Toolbox-28



Chapter 1: Maintenance Using a Team Approach Chapter Overview

In this chapter The table below lists the topics in this chapter.

Topic	See Page
Overview of Maintenance	1-2
Developing a Team Approach	1-3
Simple Repairs Anyone Can Do	1-7



Overview of Maintenance

Definition of maintenance

<u>Maintenance</u> refers to the upkeep and repair of property and equipment. It involves different tasks, including:

- make ready services;
- daily property, mechanical, and curb appeal inspections;
- preventive maintenance services and retrofitting, and;
- timely, quality responsiveness to resident service requests.

Why maintenance is important

A good Maintenance Supervisor can save and control costs more than any other source. They can do this by proper diagnosing and replacement of the part vs. the entire unit. The objective is maximum results at minimum prudent costs. Community Managers can make a major contribution to the property's financial condition with increased maintenance efficiency, expense control or reduction, and a scheduled preventive maintenance program that extends the life of equipment, fixtures, and structures.

Well maintained properties will also assist in the recruitment and retention of skilled maintenance personnel. Maintenance Technicians who increase their skill levels and accept greater responsibility create a stronger team and potentially add greater value to the property.

Who is responsible for property maintenance

The short answer is that everyone is responsible for the appearance and upkeep of the property. The Community Manager along with the Maintenance Supervisor or Service Manager is required to:

- Know what maintenance work must be done
- Take a proactive approach to resolving maintenance issues
- Make decisions
- Create a plan (daily, weekly and long term)
- Develop a budget
- Communicate regularly
- · Work with residents and contractors, and
- Understand the duties/responsibilities of maintenance personnel.

Developing a Team Approach

The manager's responsibility

Although the Maintenance Supervisor or Service Manager typically supervise and direct the work of maintenance personnel such as technicians. groundskeepers, janitors, and make-ready technicians, it is the Community Manager's ultimate responsibility for the property's effective functioning including maintenance operations.

The manager, through leadership communication and example, creates the environment where everyone is a part of the maintenance program from taking the service requests from the residents to performing the completed task in a timely and satisfactory manner to the resident

be done

What needs to To develop the team approach to ensure a well-maintained property community manager must:

- establish quality standards;
- share responsibilities;
- value the employees;
- set obtainable goals; and
- provide training opportunities for maintenance personnel and encourage professional development.

Following are some important things the community manager can do.

Emphasize the team approach

Some ways you can emphasize the team approach are:

- Share information and decision making.
- Inform the staff that maintenance and curb appeal is everyone's responsibility, not just maintenance personnel.
- Make sure the office staff knows how to take accurate and detailed service requests, saving time and money by getting the work done right the first time which means higher resident satisfaction.
- Encourage residents to report maintenance needs promptly before they become more costly repairs or emergencies.
- Follow up to make sure repairs were completed and that you have a satisfied resident.

Developing a Team Approach, Continued

Actively seek input

Some ways to actively seek input are:

- Make a point of speaking with the Maintenance Supervisor or staff every day. Know what maintenance or repair activities are scheduled for the day.
- Engage residents in conversations both on the grounds and in their homes.
- Develop a network for finding help use schools, temporary employees, contractors and vendors.
- Listen, discuss and/or explain specific problems.
- Seek input for possible decisions and timeframes. Not every problem is urgent.
- Respect workloads and schedules. Work with your Maintenance Supervisor to set schedules for daily, weekly, monthly and overtime maintenance work.

Use effective time management skills

Some ways to help people be more time efficient are:

- Work with the Maintenance Supervisor to delegate tasks.
- Assist maintenance staff in prioritizing their individual assigned tasks.

Support and value everyone's contribution

Some ways to show support are:

- Treat everyone as an important part of the team.
- Promote mutual respect for every team member.
- Respect and understand cultural influences.
- When situations arise that make people feel uncomfortable, be involved in finding an agreeable solution.
- Be aware of stereotypical attitudes and practices.

Developing a Team Approach, Continued

Use training opportunities

Some training opportunities for building a team approach to maintenance include:

- Encourage and support maintenance staff members to earn the Certificate for Apartment Maintenance Technicians (CAMT) offered by the National Apartment Association Education Institute (NAAEI), and
- Involve team members in property and apartment home inspections.

In particular, utilize the training offered by NAAEI as part of CAMT certification program. This Certificate for Maintenance Technicians (CAMT) program is available for local apartment associations and apartment management companies and can be taken as part of a national program with the instructor provided by NAAEI or through local apartment association sponsorship. The curriculum is the same.

CAMT training has seven courses designed as an introduction for new maintenance professionals or as a refresher for the more experience maintenance technician. The purpose remains the same; to give these professionals the knowledge and tools necessary to run an effective maintenance operation. There are two non-technical courses consisting of online learning followed by online practices scenarios; the five technical courses consist on hands on classroom training followed by online practice situations.

The non-technical courses include "Inside the Apartment Business" and "People, Projects, and Profits". The technical courses are: Electrical Maintenance and Repair; Plumbing Maintenance and Repair; Heating, Ventilation and Air Conditioning (HVAC) Maintenance and Repair; Appliance Maintenance and Repair; Interior and Exterior Maintenance and Repair.

Prerequisites for the certification are one year of apartment or rental housing maintenance experience, successful completion of the seven courses and online content noted above, and meeting all examination requirements within 24 months of declaring candidacy for CAMT.

For further information go to:

www.naahg.org/education/designationprograms.

Developing a Team Approach, Continued

Report results, celebrate success, and encourage training Some ways you can report results and celebrate success are:

- Share the results of your service records, such as:
 - o what went well;
 - o consistent and timely maintenance repairs;
 - o potential problems; and
 - o preventive measures to prevent similar problems;
- Make time to celebrate and acknowledge the team's successes and growth!
- Thank people for their work. It builds trust and motivates and encourages loyalty. Everyone needs to feel appreciated.
- Support the training necessary to allow maintenance personnel to enhance their skills and earn a professional designation. Community managers should not make the mistake of not sending maintenance employees to offsite training because they don't want such employees gone for a few days if it might make their job harder. This can be shortsighted. Such training will help maintenance team members do a project correctly the first time saving time and money, reduce maintenance expenses with better trained professionals, increase productivity, enhance resident satisfaction which will reduce turnover; and finally reduce employee turnover with more capable, personally satisfied maintenance professionals.

The skill standards tab contains maintenance skill standards developed by industry professionals. These skill standards provide a framework for maintenance training and the curriculum developed by NAAEI for CAMT. They also provide a guide for exam preparation and serve as a reference source for community management personnel.

Simple Repairs Anyone Can Do

The top priority

Handling service requests from residents quickly and efficiently is always management's a top priority. Therefore, if everyone knows how to determine the problem, many service requests can be handled quite easily.

Simple trouble-shooting

Troubleshooting should always begin with identifying the simple things that might be causing the problem, and then moving to the more complex things. A simple troubleshooting procedure that can be used to diagnose and complete simple repairs includes:

Step	Action
1	Identify the primary complaint by asking the resident to describe the problem(s) being experienced.
2	Locate the possible cause.
3	Fix the problem.
	Caution: Make sure every staff member understands all safety
	precautions and has been trained accordingly before attempting a repair.

Common maintenance and repairs

Some common maintenance and repairs are shown in the table below.

Problem	Possible Cause	Solution(s)
Interior door squeaks when opened or closed.	Dry hingesWorn hingesDoor atignment	 Use dry lubricant on hinges. Test hinges (by lifting door). Inspect gap clearance of door.
Low air circulation in A/C.	Dirty filter	Check filterInstall a new A/C filter.

Simple Repairs Anyone Can Do, Continued

Common maintenance and repairs, (continued)

Problem	Possible Cause	Solution(s)
Glass broken in dishwasher.	Improperly stacked dishes.Dishwasher is overloaded.	 Retrieve large glass pieces. Vacuum out the glass particles.
	Normal accident.	Leave use and care booklet.
Water constantly running into the toilet bowl.	 Tank ball not sealing correctly. Flapper worn out or damaged. Ball cock leaks. Chain under flapper. Flush lever sticking 	 Align lift wires and guide arm. Install new flapper. Install rebuild kit. Shorten the chain. Adjust flush lever.
Garbage disposal not working.	 Power not reaching unit. Circuit breaker tripped. Reset button tripped. 	 Press reset button. Check fuse or circuit breaker. Check outlet plug and wall switch position.
Refrigerator is silent and interior light is off.	 Power source is off. Burned out light bulb and unit is on defrost cycle. 	 Check outlet and plug. Check fuse or circuit breaker. Replace light bulb.
Loose commode seat.	 Loose mounting bolts. Broken or damaged seat. 	Inspect and tighten seat.Replace commode seat.
A slat fell off the living room vertical blinds.	Slat fell off the clip.Slat clip is broken.	Inspect clip, replace if needed.Reinstall the slat.

Chapter 2: The Onsite Manager's Role

Chapter Overview

In this chapter The table below lists the topics in this chapter.

Topic	See Page
A Property Manager's Responsibilities	2-2
Setting High Quality Standards	2-3
Hiring Maintenance Personnel	2-4
Assigning and Evaluating Work	2-7
Using a Contractor	2-11
The Bidding Process	2-13
The Contract	2 -15
Vendor Management	2-18



A Property Manager's Responsibilities

What you are responsible for

A Manager's responsibility for maintenance involves many things. The list below includes several key areas, but should not be considered all-inclusive.

- Set a standard for high quality work.
- Keep current with new laws and regulations that impact the property particularly those relating to safety for residents and staff.
- Keep records and required certificates (occupancy, elevators, swimming pools, etc) for the property. This includes the Environmental Protection Agency (EPA) certification for working with refrigerants and Certified Pool Operator (CPO) where required.
- Understand the maintenance repairs necessary to ensure that all OSHA, local and state requirements are met.
- Conduct inspections.
- Oversee safety issues and emergencies.
- Work closely with and utilize the skills of the maintenance supervisor or service manager.
- Work with your supervising office to plan and implement preventive maintenance programs.
- Hire qualified maintenance technicians and evaluate their performance.
- Know when to use a contractor, and how to write a job specification and conduct a bidding process.
- Understand basic contracts.
- Prepare and monitor budgets.

Benefits of maintenance knowledge

Your knowledge about maintenance adds value to the property and enhances your personal value as a manager.

It is essential that you understand how simple repairs are made. Having this information will allow you to:

- Set quality standards.
- Follow-up and inspect workmanship.
- Communicate better with maintenance personnel, residents, ownership, and contractors.
- Control maintenance expenditures.
- Work with your Maintenance Supervisor or Service Manager to manage the daily maintenance work such as:
 - o assigning tasks and prioritizing service requests, and
 - o estimating cost and time for completion

Setting High Quality Standards

Importance of setting high quality standards

One of your most significant responsibilities is to add value to the property. By setting high quality standards, you ensure that the property is well maintained and improved. Remember, well-maintained properties attract and retain residents.

Your behavior

Quality standards include the way you treat others. Your behavior sets an example for others to follow. Be respectful, ethical and honest.

The effects of high quality work

Quality also means repairs completed correctly and in a timely manner. It includes following preventive maintenance schedules.

Quality workmanship extends the useful life of everything from buildings, to heating and cooling systems, major appliances and landscaping. When repairs and maintenance are performed well, efficiency is increased and expenses are reduced. Don't just do it — do it well!

Communicate expectations

In order to effectively communicate your expectations, you must:

- Use clearly stated service requests.
- Have correct information about the specific problem and any special information. Clearly state in which room or location the item to be repaired is located.
- Understand the maintenance staff's current workload and prioritize work.
- Keep lines of communication open to
 - o avoid misunderstandings
 - o consider options, and
 - o resolve issues

Hiring Maintenance Personnel

Purpose of this topic

Often, the hiring of maintenance personnel is delegated to the Maintenance Supervisor or Service Manager, but the community manager is ultimately responsible for employee performance.

The actual hiring process is covered in depth in the CAM Human Resources Management Course. However, this topic will concentrate specifically on the technical maintenance job rather than on personnel or legal issues.

Reference: See the Human Resource Management Participant Guide for additional information.

Job description

Hiring technicians begins with writing a detailed job description. The job description should clearly detail the work to be performed. Depending on the size of the property, you may need separate job descriptions for entry level, mid-level and senior/supervisory level.

Reference: See Resource Materials for samples of Maintenance job descriptions.

Examples of Maintenance **Technician** skills

The following are skills that would be included in a job description, depending on the skill level of the Maintenance Technician.

Entry-Level skills:

- Basic knowledge of tools
- Interior make ready skills including minor painting
 Basic electric changing light bulbs, testing outlets and switches
- Follow directions well and understand safety requirements
- Good communication and organizational skills
- The willingness and ability to learn new skills
- Basic knowledge of computer skills

Mid-Level skills:

- Communication skills
- Organizational skills
- All entry level skills

Hiring Maintenance Personnel, Continued

Examples of Maintenance Technician skills, (continued)

Senior/Supervisory skills:

- · All skills mentioned above
- Budgeting skills
- Communication skills
- Organizational skills
- Building codes
- · Ability to train others

Other considerations

In addition to maintenance tasks and skills, you need to consider:

- number of years and type of experience;
- formal education or training in industry designations;
- experience working with contractors and suppliers
- ability to take/give directions and maintain schedules;
- administrative skills such as:
 - o organizing and prioritizing
 - o time management
 - o record keeping
 - o communication skills
- professional attitude and appearance

Interviewing candidates

It is advisable to have the Maintenance Supervisor and perhaps an experienced senior Maintenance Technician conduct the interview and initiate the hiring process. This is often delegated by the Community Manager.

The CAM Human Resource Management Course covers the interviewing and hiring procedures.

Reference: See the *Human Resources Management Participant Guide* for additional information.

It is helpful to use a Maintenance Skills Checklist during the interview to determine what skills the candidate has.

Reference: See the Toolbox for a sample of a Maintenance Skills Checklist.

Hiring Maintenance Personnel, Continued

Checking references

It is always advisable to check an applicant's references, criminal background, and driving record and to conduct drug testing.



Assigning and Evaluating Work

Purpose of this topic

Your Maintenance Supervisor will likely oversee daily and routine maintenance tasks. He or she will know what work is appropriate for specific individuals. On occasion, you and your supervisor may determine an outside contractor will be required to do the work. Further discussion about working with contractors is presented later in the chapter.

Our focus of this topic is to understand how to assess each staff member's skills and then match the work with the correct skill set.

Evaluating performance

Overseeing the evaluation of the maintenance team's performance is an ongoing task. Ask yourself questions such as:

- Is the employee properly assigned work for his skill level and experience?
- Is the work completed correctly and in a timely manner?
- Are any problems the result of lack of knowledge or lack of performance?

Good record keeping will provide you many sources of information to evaluate performance.

Reviewing and summarizing service requests

Service requests are important tools to help answer your questions. Part of your responsibilities may already include completing a weekly service request summary for your supervisor. Even if it is not required, it may be advisable to keep such records for purposes of:

- performance appraisals
- preventive maintenance planning and
- budgeting

Reviewing and summarizing service requests will give you information about:

- when service requests are occurring
- types of requests received
- who needs service

Assigning and Evaluating Work, Continued

Reviewing and summarizing service requests, (continued)

- average turnaround time for requests
- · status of vacant residences
- cost of service/repair
- technician work performance records
- planning maintenance and repairs
- · training and/or adding staff

Contents of a service request form

Service request forms should contain:

- Resident name and address
- · Date and time of request
- Repair or maintenance requested
- Permission to enter
- Name of service technician assigned
- Description of work completed
- Action taken: pre-inspection/work completed/repaired temporarily/parts replaced/parts ordered
- Follow up needed (if any)
- · Estimate of cost incurred
- Amount of time spent for service/repair (time in and time out)
- Follow-up call with resident or post-inspection.

Some service request forms automatically provide multiple copies. These are useful because one copy can be given to the resident, another copy to the Supervisor, and another copy can be filed in the property's resident and/or unit file. Similarly, service software programs provide such copies and computerized evaluations of work

Reference: See the Toolbox for a sample work request form.

Contents of a weekly service request summary

Weekly service request summaries may be maintained for each service technician and for the whole property. This is more easily possible with automated systems.

Assigning and Evaluating Work, Continued

Contents of a weekly service request summary, (continued)

The type of information for each maintenance technician should include:

- Name and job title
- Number of service requests completed
- · Types of work performed
- Total number of hours worked
- Space for comments

The type of information for the property should include:

- Total number of service requests received
- Total number completed and pending
- Total number needing parts
- Total number remaining from previous week
- Total number of follow-up calls/inspections made
- Total number of emergencies handled
- Total number of make-readies cleaned, painted, repaired and completed
- Total number of preventive maintenance tasks completed and hours worked

Reference: See the Toolbox for a sample work request summary.

Work order tracking software

Today many properties use software programs that record work order assignments by type and employee. They capture information such as:

- who is being assigned what task(s)
- how many assignments are given in one day
- how many assignments are completed and how long did each assignment take
- how many call backs were made.

Several p ograms tie this software to locked key drawers so that it is mandatory to enter codes and descriptions before keys can be pulled. These programs provide both excellent reporting and effective key control.

Make-ready and maintenance software

Another change to onsite operations is the introduction of make-ready and maintenance software. These programs are designed to eliminate the typical "white board" make-ready tracking system and capture key information from work orders, including:

Assigning and Evaluating Work, Continued

Make-ready and maintenance software, (continued)

- type of service
- who performed the service
- how quickly the service was done
- what parts were used (and how that affects shop inventory) as well as
- follow-up on repeat service calls
- · identifying failing building components and
- targeting preventive maintenance.

These programs allow companies to schedule, budget, allocate and track resources necessary to turn over units as well as make repairs. Naturally, the faster and more accurately a make-ready is done, the less down time and lost rent is incurred and the more likely the new resident will be able to move in on time. No call backs for service after the move in remains the objective.

Some of these programs even interface with property suppliers and can help in scheduling outside contractors or ordering supplies.

Manual tracking systems

Some properties may not have sufficient computer capability for maintenance personnel or they may decide that they do not wish to incur the cost. Therefore, manual tracking systems remain the norm in many companies.

Using a Contractor

Definition: contractor

A <u>contractor</u> is a person or a company who is a separate business entity. They usually perform specific services or work and are hired to perform activities that your normal maintenance or housekeeping staff cannot do or where it has been determined that it is more cost effective to use such an outside yendor.

How a contractor is selected

Contractors are generally selected by using a bidding process, and require a legal contract before work can begin.

<u>Reference</u>: See the topics "The Bidding Process" and "The Contract" for additional information.

When to hire a contractor

Use a contractor when experiencing any of the following circumstances:

- Shortage of staff due to illness, vacation, termination.
- Lack of specific skills (parking lot repairs/resurfacing, roofing, landscaping).
- Lack of specialized equipment (backhoes, welding equipment).
- Lack of required licenses, permits (electrical and plumbing work).
- To save money (materials or supplies may be included in contract prices and purchased at wholesale or bulk prices)
- Materials or supplies may not be available locally.
- Total cost of labor in terms of special insurance, licensing fees, payroll taxes, etc. may be more cost effective if borne by the contractor.

Advantages to using contractors

Some advantages to using contractors are:

- Specialized skills and quality based experience.
- Avoiding expenses for purchasing and maintaining specialized equipment are avoided.
- The maintenance staff can continue to meet daily service needs and preventive maintenance schedule.
- The contractor handles required licenses, permits and insurance.
- Safeguards warranty issues.
- It may provide faster, more accurate, timely, and complete work product.

Using a Contractor, Continued

Disadvantages to using contractors

Some disadvantages to using contractors are:

- Quality of work may vary from contractor to contractor.
- Contract disputes can result in property liens and legal problems.

Finding a contractor

Some ways to find a contractor include:

- Researching the job to see what is needed
- Asking for referrals
- Contacting the local apartment association
- Contacting other apartment communities or management companies
- · Asking other contractors
- Looking in the newspaper
- Looking in trade magazines
- Asking suppliers lumber yards, paint companies
- Asking utility companies
- Reviewing who did prior work at your property or other apartment communities
- Calling the Better Business Bureau

Supervising a contractor's work

The Community Manager (and their supervisor) and the Maintenance Supervisor will need to decide how the job will be supervised. Most often, the Maintenance Supervisor will assume this responsibility unless the dollar cost and/or time involved make it more feasible for outside supervision of the work. However, this is an excellent opportunity to learn more about a specific project. It is always a good idea to be aware of what is happening on the property. Check with the contractor frequently, visually inspect the work daily and raise any questions and/or concerns to your Supervisor.

The Bidding Process

Purpose of the bidding process

The bidding process will help you to select the best contractor for the job.

The best contractor is not necessarily the cheapest. Sound business practices frequently call for bids from three (3) separate contractors. This should provide enough information to compare and select a contractor.

Scope of work

It is necessary for you to present all bidders with the same scope of work to be completed if you want accurate and complete competitive bids. It may be necessary for you hire a consultant to determine exactly what the scope of the work should be.

Accurate and complete job specifications are the most important part of the bidding process. Incomplete or inaccurate specifications will mean problems when work begins.

Job specifications should include the following:

- Detailed description of the work to be done, including preparation and application (quantity of work and units of measure to be used)
- Specific materials and equipment to be used
- Location of the job
- Timeframe for completion
- Licenses and permits needed
- Insurance, warranties, guarantees
- Payment schedules
- Start and end of the work day
- Clean up required and how often
- List of references
- OSHA requirements

Confidentiality

The bids should be kept confidential. Do not share details with other contractors who may wish to bid. Advise your staff to keep information confidential, as well. This is another opportunity to set the standard for quality. You are looking for the best candidate, not just the least expensive one.

The Bidding Process, Continued

Reference checking

Before a bid is accepted and certainly before a contract is signed, references need to be checked. References should be for work done locally so that you may also visually inspect the work. You may also want to check with the Better Business Bureau to learn if any complaints have been filed against a particular contractor.



The Contract

Purpose of a contract

Contracts are used to minimize risk to the property, its owners and employees.

<u>Reference</u>: See the *Legal Aspects & Responsibilities Participant Guide* for additional information and a sample contract.

Who should sign a contract?

The conditions for negotiating a contract and the people empowered to sign a contract are usually covered by company policy. The scope of the project and the dollar amount may require that a company supervisor or owner sign a contract.

Legal review recommended

All contracts are subject to local, state and federal laws. An attorney should review contracts before they are signed to ensure compliance and reduce risk.

What should a contract contain?

A contract should contain:

- The scope and nature of the work to be performed, outlining the detailed specifications.
- The starting and completion dates.
- A remedies and cancellation clause.
- A hold-harmless clause.
- Proof of workers compensation and proof of comprehensive general liability insurance.
 - Reference: See the Toolbox for a sample Certificate of Insurance.
- Total cost of work.
- A payment schedule, outlining retainage fees.
 - Note: A retainage fee is a percentage of the contractor's payment (usually 10%) that is held by the property or the management company for a specific time period (usually 30 days) after the job is completed. The purpose is to guarantee the completion of the work and cover any defects in the workmanship.
- List of subcontractors, if any, being used on the project.
- Performance penalties, if applicable.
- Time contractor will start work in the morning and end in the evening.
- Required clean up and frequency.

The Contract, Continued

Ways to reduce risk

There are several ways to reduce risk by specifications or requirements you may include in a contract. These include:

- Lien waivers
- Multiple payee payments
- Payment and performance bonds
- Certificates of insurance

Lien waivers

A waiver of lien is a signed and notarized document that waives or surrenders all claims against the property or the management company from the contractor, his employees, his subcontractors and his material suppliers. It is very possible that a lawsuit or lien (legal claim) could be filed against an apartment community by a vendor or subcontractor for non-payment, even though the community paid the contractor in full, but had not received a lien waiver. Requiring lien waivers from subcontractors working for the general contractor is a good business practice.

Lien waivers must be signed before disbursements are made. Local laws may require lien waivers to be filed with county or city agencies.

Reference: See the Legal Aspects and Responsibilities Participant Guide for additional information and a sample of a lien waiver.

Multiple payee payments

Making disbursement checks payable to both the contractor and his supplier can also reduce risk. This method ensures both parties are paid and protects against mechanical or material liens on the property. This agreement would be outlined in the draw schedule. Sometimes, this method is used after a contract is signed when the contractor is unable to meet his obligations to vendors. However, in these cases the method is not included in the draw schedule.

Payment and performance bonds

Companies may require the contractor to furnish bonds ensuring both the price and the performance of his work. These bonds are usually required by lenders or general contractors in the construction of new apartments, and are required in some states for large jobs. Copies of the bonds are attached to the contract, if required.

The Contract, Continued

Certificates of insurance

Contractors are required to provide proof of insurance for liability and Workers Compensation Insurance for contractor employees. The purpose is to prevent injury claims against the property and protect against property damage caused by contractor negligence.

If a contractor cannot provide adequate insurance coverage, the work should be contracted to another company that can provide the required coverage.

Reference: See the Toolbox for a sample of an insurance certificate.



Vendor Management

What vendors may be used for

In addition to single-event large jobs, vendors are frequently used for recurring weekly or monthly maintenance, such as:

- pool maintenance
- landscaping and
- pest control.

Often, interior painting and carpet maintenance are also contracted.

Use a vendor agreement

Just as in the case of large job contracts, formal vendor policies should be set and a vendor agreement should be executed.

Contents of a vendor agreement

Important areas to cover in the agreement include:

- Does the vendor supply goods alone, or goods and services?
- Who will get the bill management or owner of property?
- Will payments be processed from invoices or statements?
- Will payment be made within 30 days?
- Who has to approve invoices? Are there approval limits?
- Will employees be prohibited from accepting gifts or favors from vendors?
- Will vendors be required to complete a W-9 and submit a valid certificate of insurance prior to beginning work?
- Will the vendor be responsible for damage he causes, including water intrusion that can cause mold?
- Will the vendor be held responsible for screening its employees and their conduct while on your property?
- Will vendors be required to meet your fair housing, drug-free, weaponfree workplace policies?
- Will vendors be asked to use utilities prudently?

Chapter 3: Exterior Maintenance

Chapter Overview

In this chapter The table below lists the topics in this chapter.

Topic	See Page
Elements of Exterior Maintenance	3-2
Property Inspections	3-3
Common Area Maintenance Checklist	3-4
Building Maintenance Checklist (Exterior)	3-8



Elements of Exterior Maintenance

What is exterior maintenance?

Exterior maintenance is the ongoing inspection, repair or replacement of those areas outside of your residential and other buildings.

Elements of exterior maintenance

Specifically, exterior maintenance includes the following elements:

- Property grounds
- Fences, retaining walls
- Landscape irrigation
- Exterior lighting
- Building exteriors including siding, roofs, stairways and
- Pools, ponds and other water features
- Utility buildings, trash and mail areas
- · Parking lots and sidewalks, carports and garages
- Tennis courts, spas, volleyball areas, playgrounds and picnic areas
 All public accessibility areas with ADA and Fair Housing Act implications



Property Inspections

When to inspect

To evaluate the condition of the buildings, grounds and common areas on your property, it is necessary to inspect everything on a regular basis – preferably once a month.

Benefits of frequent inspections

Inspections can help you find problems when they are relatively small, easy and inexpensive to repair. You will be able to identify specific and immediate problems that need the attention of your supervisor and discuss long-range plans and preventive maintenance programs. Frequent inspections also ensure the safety of the property and residents.

Who should accompany you?

The Maintenance Supervisor should accompany you. Inspections also provide excellent training opportunities for others on your staff.

Documenting the inspection

Using a checklist allows you to have a written record of the inspection, and can be used for comparison with previous inspections. Extensive checklists are provided in this chapter.

Photos also can be useful, and digital cameras are now more commonplace on properties and provide excellent backup for inspections and "incidents" requiring photographs.

Checklists

The following are checklists that you can use to document the inspections of the exterior of the property.

Common Area Maintenance Checklist

Checklist The following is a checklist you can use for common area maintenance.

Lasation	\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	In an action/Data	Ctatus	Duals laws / A ations
Location	What to look for	Inspection/Date	Status	Problem/Action
Entrance and	Clean and well-maintained surfaces,			
driveways	proper grading and drainage; sewers			
Property curb appeal	covered and clear of debris and trip			
	hazards.			
Signage	Signage well maintained, visible, and			
	lit at night.			
Parking lot	Free of deteriorated surfaces,			
	potholes, oil stains, and standing			
	gravel. Proper grading and drainage.			
	Striped and easily visible.			
	Curb stops, bollards, or approved			
	barriers are provided and secure at			
	the edge of parking areas.			
	Proper grading and drainage.			
Garages and	Damage and/or leaks to roofs,			
covered parking	support posts, siding or doors. Oil			
	stains. Smoke detectors and lighting			
Improperly tagged	Free of debris and trash.			
cars				
Parked vehicles	Abandoned or disabled vehicles.			
	Parking permits, license plates, and			
	inspection stickers.			
Accessory	Structurally sound and free of loose,			
Structures:	bent, broken deteriorated or missing			
fences, retaining	materials.			
walls, storage and				
mail areas				
	1			

Common Area Maintenance Checklist, Continued

Checklist, (continued)

Location	What to look for	Inspection/Date	Status	Problem/Action
	Free from any accumulation of			
	rubbish or garbage and maintained			
	in a clean, safe and sanitary manner.			
	Graffiti.			
	Proper grading and drainage.			
Trash Containers;	Dumpsters/trash containers in good			
Compactors	condition.			
	Cleanliness and odor.			
	Extermination program.			
	Drain plug removed from new			
	dumpsters.			
Sidewalks	Structurally sound, level and free of			
	loose, bent, broken, deteriorated or			
	missing materials.	·		
	Proper grading and drainage.			
Lighting	Sufficient for sight and safety.			
	Check lighting at night.			
	Structurally sound and operating			
Maintenance shop	Clean, adequately lighted, ventilated,	, i		
	and secure.			
	Equipment/tools stocked and stored			
	properly.			
	Proper storage of paints, solvents,			
	pesticides, etc.			
	Personal Protective Equipment			
	(PPE) available, and in good			
	condition. Fire extinguishers checked			
	and updated			

Common Area Maintenance Checklist, Continued

Checklist, (continued)

Location	What to look for	Inspection/Date	Status	Problem/Action
	Inventory - parts properly stocked and stored. SDS sheets on file. Have communication plan posted. OSHA form 200 posted. First aid kits. EPA recovery			
	equipment registration displayed.			
Landscaping	Lawns and shrubs well maintained. Dead trees/shrubs are removed. Tree limbs over gutters and roofs are pruned. Soil erosion; mulch; decorative rock. Sprinkler leaks			
Sprinkler system	Sprinkler system functional. Without leaks. Proper spray pattern heads installed. Rain and freeze stats operational.			
Pool	Complies with local ordinances for occupancy, safety precautions, chemical testing with current log updated. Posted pool rules and regulations. SDS sheets kept in log in pool area.			
	Fencing, self-locking gates around the pools, railings, surfaces, locks well maintained.			
	Electrical and plumbing systems, water supply, drain, well maintained and working properly.			

Common Area Maintenance Checklist, Continued

Checklist, (continued)

Location	What to look for	Inspection/Date	Status	Problem/Action
	Structure – walls, bottom, ladders, steps in good condition. Markings correct.			
	Signage – visible and well maintained.			
	Accessories – chairs, tables, benches, umbrellas well maintained.			
Other: tennis, volleyball courts, playground, etc.	Surface or area well maintained; lighting, cleanliness and safety. Playground equipment in safe, useable condition.			
Other: ponds, fountains, underground storage tanks, etc	Clean, functioning – electrical/plumbing systems. Safety. GFIC protected.			
Snow and ice	Timely and thorough removal. Appropriate use of salt/sand/de-icer. Records kept current.			
	Dangerous areas noted, treated, and properly marked			

Building Maintenance Checklist (Exterior)

Checklist The following is a checklist you can use for exterior building maintenance.

Location	What to look for	Inspection/Date	▲ Status	Problem/Action
Exterior	All exterior surfaces are protected from wind, rain and snow by painting, staining, sealing, siding or the use of other weather tight materials to prevent deterioration.			
	Balcony joists and decks are structurally sound and free of cracked, rotted, rusted or bowed materials.			
	Awnings are anchored to the structure and free of loose, torn, bent or deteriorated materials.			
	Porches, stairs and stringers are level and structurally sound.		· ·	
	Decorative features are anchored to the structure and free of loose, missing or deteriorated materials.			
	Columns are structurally sound and free of any loose, bowed or deteriorated materials.			
	Property is free of accumulation of rubbish or garbage and maintained in a clean, safe and sanitary manner.			
	Proper grading and drainage of exterior property areas Missing or worn ground cover/grass.			

Building Maintenance Checklist (Exterior), Continued

Checklist, (continued)

Location	What to look for	Inspection/Date	Status	Problem/Action
	Siding is weather tight and secure to			
	the exterior wall, free of bent,			
	missing or deteriorated materials.			
	Brickwork is free of cracked, loose or			
	deteriorated materials.			
	Foundation shows no sign of			
	seepage or entrance of rodents into			
	the building. Foundation is			
	structurally sound and free of large			
	cracks, holes, or loose materials.			
	Sewer and drain connections and			
	sump pump working properly.			
	Shutters are secure to the exterior			
	wall and free of loose, deteriorated or		•	
	missing materials.			
	Antenna, cable and phone systems			
	securely fastened; all wires intact.			
Meters	Functional; no signs of tampering.			·
	Meter labeled.			
Other				

Chapter 4: Interior Maintenance

Chapter Overview

In this chapter The table below lists the topics in this chapter.

Topic	See Page
Elements of Interior Maintenance	4-2
Make-Ready Maintenance	4-3
Unit Interior Maintenance Checklist	4-6
Building Maintenance Checklist (Interior)	4-13
Managing Inventory	4-15



Elements of Interior Maintenance

What is Interior Maintenance?

Interior Maintenance refers to the work required to inspect, repair or replace items that keep building interiors, including residential units, in excellent condition.

Elements of Interior Maintenance

Knowledge about the following areas is helpful for the community manager and improves their capability in overseeing the implementation of the property's interior maintenance functions:

- · Office and clubhouse areas
- Interior hallways
- Cleaning and janitorial areas
- Business centers, fitness centers, laundries and other interior amenities and common areas
- Service to occupied units
- · Make ready of residential units



Make-Ready Maintenance

Manager's responsibilities

Make-ready maintenance is one of the most intensive activities in apartment management. As the manager, you will be involved in:

- pre-inspecting the unit
- deciding what maintenance and make-ready tasks are needed, and
- post-inspection to ensure that
 - o the work is completed satisfactorily, in a timely manner, and
 - o the apartment home is ready for showing and eventual occupancy.

Although this is sometimes delegated to other staff members, the Community Manager is responsible for the "market-ready" condition of the property.

Maintenance department responsibilities

The Maintenance Supervisor or Service Manager, with oversight from the Community Manager, is responsible for monitoring future move-outs and ensuring vacant apartments are made ready timely and to the required highest standard possible. Details make the difference in the make-ready process.

Move-out inspection

Inspect each vacant unit

Each vacant unit will need to be inspected at move-out to determine the scope of the make ready process for this particular unit.

- Is there significant physical damage?
- Are major appliances in good working condition?
- Is there retrofit or rehab work to be done during the turn?
- Will contractors be involved, and what will be the scope of their work?

Be thorough

Inspections must be thorough. A good inspection of appliances includes turning on the stove, dishwasher, exhaust fans and disposal, and opening the refrigerator door.

It is a good idea to carry a flashlight and notebook or paper for notes when making inspections.

Have a plan

You want to be sure you are able to meet the expectations of prospective residents. You should work with your maintenance and housekeeping staffs to develop sound and efficient plans for handling make-readies.

Make-Ready Maintenance, Continued

Deciding what tasks should be done and when

As a Community Manager, you will organize and supervise the necessary people and contractors to complete the make-ready process or oversee this being done by the Maintenance Supervisor or Service Manager. You need to know:

- The tasks and supplies required to "turn" a vacant unit.
- · Amount of time each task takes.
- How many tasks can be done at the same time without staff or contractors getting in each other's way or interfering with the work already completed

Quality of work

The Community Manager must set the quality expectation for the apartment home and it must be clear to employees or contractors who paint, clean, shampoo, or change carpet and employees what is acceptable in terms of their work quality and timeliness.

You or someone you designate will need to inspect the units as they complete various stages of make-ready. This will ensure tasks are being completed to market-ready standards in reasonable time and order without overlaps with other workers or vendors.

Order of make-ready maintenance

The usual order in which make-ready maintenance occurs is:

- Trash removal (refuse and abandoned personal belongings)
 Note; If you are unclear as to abandonment, you may wish to have a policy to not remove personal property without checking with the former resident if they can be reached.
- Reference See the topic "Move Out Inspections" in the Occupancy Management chapter of the *Management of Residential Issues*Participant Guide for additional information on handling items left behind by a resident.
- Pest control
- Mechanical systems electrical, plumbing, appliances, HVAC
- Retrofits and rehab items
- Sheetrock, doors, windows, locks, cabinets, counters
- Painting, caulking
- Flooring
- Final cleaning and welcome gift

Make-Ready Maintenance, Continued

Turn around time requirements

Many companies establish standard turn around time requirements.

Example: 5-7 working days following the day of move-out.

Market-ready requirements

Some companies also have goals such as having 75% of all vacant units "market-ready" at all times. Such targets help ensure maximum effort and focus on the best possible, most complete apartment home inventory.

Your occupancy level and the progress of your leasing results depend greatly on the quantity of your rent ready units as well as the quality of each of those apartment homes. If high quality units in sufficient quantities are not available to lease at all times, your current occupancy and your leased occupancy will decline. Clean, like-new, as if never lived in apartment homes should be the goal. Move-in condition is the key to start a residency in the right way.

Checklists

The following are checklists that you can use to document the inspections of the interior of the property.

Unit Interior Maintenance Checklist

Checklist The following is a checklist that can be used for unit interior maintenance.

Location	What to look for	Inspection Date	Status	Problem/Action
Walls & Ceilings	Structurally sound and free of water	mapeolion Date	Status	F100leIII/Action
Walls & Cellings				
	damage.			
	Clean and free of holes, dents,			
	cracks and loose drywall taping.			
	Wallpaper or wall coverings are			
	adhered to the wall and free of loose,			
	torn, missing or deteriorated			
	materials.			
	Shower walls and grout are water			
	tight and free of mold or mildew.			
	Base molding and trim are secure to			
	the wall or ceiling and free of cracks			
	or missing sections.		•	
Floors	Floors are structurally sound, level			
	and free of rotting wood.			
	Floor coverings are secure, clean,			
	impervious to water and free of			
	broken, cracked, worn or missing			
	materials.			
	Carpeting is clean and secure to the			
	floor; free of holes, tears, burns,			
	stains and loose strands.			
	Stair treads, risers and stringers are			
	structurally sound; stair coverings			
	are secure and level to prevent trip			
	hazards. Stairs are free of any loose,			
	broken or deteriorated materials.			

Checklist, (continued)

Location	What to look for	Inspection Date	Status	Problem/Action
Doors	Doors and doorframes must be free			
	of holes, cracks and deteriorated			
	materials.			
	Door hardware intact. Locks at the			
	entrances to all dwelling units tightly			
	secure the door.			
Cabinets	Kitchen and bathroom cabinet			
	surfaces can be easily cleaned.			
	Cabinets are free of water damage			
	and loose, missing or broken			
	materials and hardware. Doors open			
0 1 1	and close easily within the frame.			
Counter tops	Free of damage, stains or scarring.			
Safety	Approved smoke detectors are			
	installed and maintained in hallways			
	and stairways. Smoke detectors are			
	located in each apartment of			
	dwelling.			
	Fire extinguishers are available in	·		
	common areas.			
	Mailboxes are labeled and secure.			
Windows	No cracks in panes, clean, tracks			
	and sills clean, blinds/shades in			
	working order.			
Drapery and rods	Good condition, clean, securely			
	attached.			

Checklist, (continued)

Location	What to look for	Inspection Date	Status	Problem/Action
Electrical	Common areas have adequate			
	lighting. (A minimum of 10-foot			
	candles of natural or artificial light			
	should be provided at the tread			
	level).			
	Light fixtures are in working order			
	and bulbs and fixture covers are			
	clean.			
	Conduit completely encloses			
	electrical wiring.			
	Electrical outlets, switches and			
	junction boxes are wired properly,			
	operate safely and have secure			
	cover plates. Cover plates are free of		•	
	charred surfaces.			
	Intercom or buzzer systems are			
	maintained and labeled.			
	Panels and circuits are not			
	overloaded. All openings are covered			
	and circuits labeled. Panels provide			
	adequate service and operate safely.	•		
				Continued on next page
				Continued on Hoxt page

Checklist, (continued)

Location	What to look for	Inspection Date	Status	Problem/Action
Appliances	All appliances must be installed			
	correctly and free of broken, missing			
	or loose parts.			
	Refrigerators should be cleaned and			
	maintain the proper temperatures.			
	Stoves must be installed properly,			
	free of gas leaks or electrical			
	hazards.			
	Washing machines are free of water			
	leaks, electrical hazards and broken			
	or missing parts.			
	Dryers are installed and vented			
	according to local code.			
	Air conditioners are properly installed		•	
	and functional.			
Plumbing	All plumbing fixtures drain quickly			
	and can be easily cleaned. Fixtures			
	are properly installed and free of			
	leaks, cracks or deterioration. Hot			
	and cold water is supplied at all			
	faucets and showerheads.			
	Toilets are free of leaks and operate			
	properly.			
	Faucets are operable, secure and			·
	free of leaks, cracks and corrosion.			

Checklist, (continued)

Location	What to look for	Inspection Date	Status	Problem/Action
	Plumbing supply lines must be			
	connected to an approved water			
	supply system.			
	Plumbing waste lines are free of			
	leaks or obstructions. No odor of			
	sewer gas is present.			
	Water heaters must provide an			
	adequate supply of hot water at a			
	temperature of not less than 110			
	degrees F. and no more than 140			
	degrees.			
	Temperature and pressure relief			
	valves are installed on the water			
	heater at the proper location. The	·	·	
	valve is free of leaking, corroded,			
	obstructed or missing parts.			
	A rigid copper or galvanized steel			
	discharge pipe is installed at the			
	temperature and pressure relief	Y		
	valve. An air gap of at least twice the			
	diameter of the pipe is provided.			
	Gas burning water heaters are			
	properly vented to allow toxic gas to			
	exit the building safely. Ductwork or			
	vents are tight fitting and free of			
	holes or deterioration.			

Checklist, (continued)

Location	What to look for	Inspection Date	Status	Problem/Action
Heating and	Unit receives adequate heat during	<u>-</u>		
ventilation	heating season.			
	Baseboard heater covers are present			
	and secure.			
	Vents are clean and free from			
	obstructions, loose, missing, bent or			
	broken materials.			
	Thermostats work and properly			
	regulate the temperature within the			
	unit. Thermostat is level.			
	Exhaust fan works; has a secure			
	cover and no exposed wiring.			
Mechanical	Boilers are free of leaks and broken,			
	corroded or missing parts.		•	
	Fuel burning equipment is properly			
	vented to allow toxic gas to exit the			
	building safely. Ductwork or vents			
	must be tight fitting and free of holes			
	or deterioration.	_		
	Proper clearances are maintained			
	between combustible materials and	•		
	all heat producing equipment and			
	appliances.			

Checklist, (continued)

Location	What to look for	Inspection Date	Status	Problem/Action
	A rigid copper or galvanized steel			
	discharge pipe is installed at the			
	temperature and pressure relief			
	valve. An air gap at least twice the			
	diameter of the pipe must be			
	present. (The bottom of the pipe			
	should not be threaded).			
	Safety valves are provided and in			
	working order to allow for immediate			
	shut off of the gas supply to fuel			
	burning appliances.			
	Combustion air vents are provided			
	and free of obstructions to allow for			
	complete combustion of fuel burning		•	
	appliances.			

Building Maintenance Checklist (Interior)

Checklist The following is a checklist you can use for interior building maintenance.

Location	What to look for	Inspection/Date	Status	Problem/Action
Doors	Hardware and locks must tightly			
	secure the door. Peepholes and			
	deadbolts installed to code.			
	Apartment number and addresses			
	marked correctly. Visible from afar			
	Doorframe molding and sidelights			
	are secure, weather tight and rodent			
	proof and free of loose, broken or			
	deteriorated materials.			
Windows	Window frames are weather tight			
	and free of loose or deteriorated			
	materials. Window locking devices			
	work and meet code standards.			
	Windows panes must be free of		, v	
	broken or cracked glass.			
	Windows operate easily and are			
	capable of being held in position by			
	window hardware.			
	Screens present and in good			
	condition.			
	Window blinds and curtains should			
	have tangle free cords.			
Handrails and	Exterior and interior handrails and			
guardrails	guardrails are installed where			
	required to prevent accidents.			
	Handrails and guardrails are firmly			
	fastened and free of loose,			
	deteriorated or missing parts.			

Building Maintenance Checklist (Interior) Continued

Checklist, (continued)

Location	What to look for	Inspection/Date	Status	Problem/Action
Roofs	Shingles are weather tight and free			
	of loose, missing or deteriorated			
	materials.			
	Gutters and downspouts are secure			
	and free of obstructions or missing			
	materials and installed to direct water			
	away from the structure.			
	Chimneys are straight, structurally			
	sound, and properly flashed.			
	Chimneys are free of loose, missing,			
	spalled or cracked masonry.			
	Chimney caps are present and			
	secured.			

Managing Inventory

Importance of inventory management

Material purchasing and managing inventory contributes to the Net Operating Income and consequently adds value. Maintenance and repairs can be handled more efficiently when tools or parts are readily available.

Who is responsible?

The Maintenance Supervisor, under the direction of the community manager, is responsible for maintaining an inventory of frequently used parts and supplies and balancing the expense of the inventory with the timing of the need.

Standard inventory

Standard inventory includes items that are used frequently, items that are used infrequently, or that are extremely expensive, are not normally included in standard inventories.

Keeping costs down

Purchasing items in bulk and standard sizes can help reduce inventory costs, yet large inventories can be difficult to maintain and control. Keeping more than one or two extras of major appliances does not make sense nor is space likely available for storage.

Product knowledge can save you time and money. You may work with your Maintenance Supervisor in developing your inventory items and "shopping list," but it is essential that you understand each of the items and their role in your everyday maintenance of exteriors, interiors and apartment units.

In addition to understanding maintenance terminology and industry or common names, managers must understand the concepts of comparative shopping. It is much like shopping for weekly groceries or big-ticket items like refrigerators.

Comparing quality, cost, size and supplier

Assume you need to purchase garbage disposal units for the property. You have read Consumer Reports to narrow down your purchase to one brand, but learn there are generally three (3) grades in every tool, supply and part that you buy:

- Basic least expensive, short life expectancy.
- Slightly more expensive more durable, and has stainless steel blades.
- Heavy duty most expensive, long life expectancy, all stainless steel parts.

Managing Inventory, Continued

Comparing quality, cost, size and supplier, (continued) To make your decision, you need to calculate the short and long-term costs – such as how often you will need to repurchase these items. You also need to consider the owner's maintenance goals, and then decide on the best value. Current equipment on the property should be considered. Should the same brand be used that was used when built or renovated. If an item has a relatively short useful life anyway, maybe top quality isn't necessary.

If your owner plans to improve the property on a minimal level and then sell the property, that goal will impact your purchasing just as the goal to upgrade and enhance the property for a long term hold would.

Buy what works best for you

Always buy in the quantity and size that works best for you. Constraints could be:

- a small shop area,
- small budgets, or
- mostly contractor work rather than in-house maintenance.

Storage of tools and supplies

Proper care and storage of tools and supplies is essential. A well considered purchase of paint or a new hand tool for added efficiency will be poorly spent money if the paint cans are sealed poorly or the tool is left out in the rain.

Managers should consider the following.

- Controlling inventory costs is important.
- Storage areas should be secure, conveniently located and properly organized to minimize the risks of theft and loss due to spoilage.
- All OSHA standards should be followed for safety purposes.

Relationships with suppliers and contractors

An important task as a manager is to ensure that good working relationships exist with suppliers and contractors. This is often handled directly by the Maintenance Supervisor or Service Manager. Creating sound, ongoing business relationships benefit you and the supplier. These relationships may be especially helpful in emergency situations and when special products must be found.

Managing Inventory, Continued

Relationships with suppliers and contractors, (continued)

The benefits are:

- Time saved because you trust the product and prices. (However, do not be afraid to get second opinions on costs, services, etc).
- Suppliers who know your product and needs can suggest an appropriate selection of products.
- · Purchases are delivered.
- Many suppliers measure and install products.

Vendor programs

Many property management companies and owners have developed national buying programs with certain vendors and suppliers. Many of the programs require certain levels of purchases in order to guarantee lower pricing levels. Rebates may be tied to required spending. A Community Manager must stay abreast of those purchasing requirements, including pricing structures and availability. It is important to purchase products that are in the best interest of the property. Do not always buy what is on sale that week.

Maintenance management software

Today there are maintenance management software programs that help:

- generate and track work orders.
- schedule preventive maintenance.
- produce inventories for parts and supplies.
- categorize expenses
- analyze employee and contractor productivity; and
- provide histories for all property components.

These programs require significant upfront training but can be successful in lowering maintenance expense and improving property productivity. Many of these software providers are members of the local and national apartment associations and can discuss your needs.

Record keeping

Finally, and in all cases, no matter the level of sophistication, you should maintain good records to monitor purchases, keep warranties and plan future purchases.

Reference: See the Toolbox for a sample property inventory form.

Chapter 5: Preventive Maintenance

Chapter Overview

In this chapter The table below lists the topics in this chapter.

Topic	See Page
Overview of Preventive Maintenance	5-2
Developing a Preventive Maintenance Program	5-4
Assigning Personnel to Complete the Work	5-7
Monitoring the Preventive Maintenance Program	5-8
Conservation	5-10
Green Property Management	5-12



Overview of Preventive Maintenance

What is Preventive Maintenance?

Preventive Maintenance (PM) is a proactive approach to protecting and maintaining the value of property assets. It requires significant planning and scheduling. It is designed to:

- · extend the life of equipment;
- · reduce unexpected problems; and
- lessen the likelihood of normal problems becoming more costly ones.

Who is responsible?

Managers are responsible for planning and overseeing the implementation of preventive maintenance activities, but the success of PM is based on everyone's contributions. This includes the manager and the maintenance staff.

Benefits of a preventive maintenance program

A properly administered PM program will:

- reduce service requests;
- reduce expenses;
- extend the useful life of fixtures and equipment;
- increase resident satisfaction and resident retention; and
- increase the value of the property.

Many properties suffer physically and economically as a result of an inadequate preventive maintenance program.

Cleaning a dirty condensing unit (\$5-10) with staff labor is considerably less expensive than replacing the condensing unit (\$400-600) when it breaks down because it was not cleaned.

When it may be required

Lenders and insurers frequently require evidence of some type of ongoing preventive maintenance program, including a system of follow-up, especially for areas of maintenance involving safety, water intrusion and areas of environmental pollution and compliance concern.

Overview of Preventive Maintenance, Continued

Success factors

The following are key factors that will add to the success of your PM program:

Gain the commitment of everyone.

- Involve your staff in planning, scheduling and implementing your preventive maintenance program.
- Review the PM plan with your staff and discuss everyone's assignment.
- · Lead by example.

Customize your program to address the specific needs of your apartment community.

- · Consider all aspects of the community:
 - o Owner's goals
 - o Type of equipment used and frequency of use
 - o Property size, age and geographical region
 - o Residents' profile and special needs
 - o Staff and resources
 - o Seasonal issues (PM needs in summer and winter)
 - o Budget

Communicate frequently with your staff.

- Keep staff informed of maintenance activities.
- Encourage your staff to keep one another informed.
- Provide staff with access to PM information.
- Implement preventive maintenance as a team effort.
- Review the budget with the entire staff.
- Emphasize the value of PM and the staff's involvement.

Monitor and follow up on PM activities.

- Keep track of maintenance work records.
- Make sure work is inspected.
- If there is an action item, ensure it gets completed by the deadline.
- Review PM activities on a regular basis.

Developing a Preventive Maintenance Program

Inspections and inventory

A good preventive maintenance (PM) program begins with a thorough inspection of the property and a list of all items that are subject to regular inspection. This list can be developed or updated by walking through the property and taking note of maintenance equipment, structural components and the condition of the landscaping.

To support the team approach, ask staff members to take part in some or all of the inspections.

Items to be included

Examples of items that should be included in a preventive maintenance program:

AC coils

AC condenser

Balconies

Blower motors

Fences

Fire extinguishers

Foundations/buildings

Furnace and A/C filters

Boilers
Carpentry
Carpeting
Caulking
Chimneys

Gutters
Water heaters
Landscaping
Lighting
Plumbing/flutu

Chimneys
Clubhouse & models
Common areas
Culverts
Curb/sidewalks
Downspouts
Electric panel/switches
Entry gates

Plumbing/fixture
Pools
Roofs
Screens
Screens
Sewers/drains
Signage
Smoke alarms
Sprinkler systems

Exterior walls

Exterior surfaces

Establish tasks and frequency

After identifying the items subject to preventive maintenance, establish the tasks to complete each item and the frequency with which these tasks should be performed (daily, weekly, quarterly, etc.).

Stairs/Handrails

Create a maintenance schedule

The maintenance schedule includes the list of items that are subject to regular maintenance and the date when the preventive maintenance is scheduled. In addition to timing concerns (daily, weekly, monthly, etc.) seasonal maintenance must be considered part of the plan.

Developing a Preventive Maintenance Program, Continued

Create a maintenance schedule, (continued)

Climate and property location influence the items that must be on the list. Checking supplies for ice and snow conditions would be normal for a Chicago-area property, but not for one in the Tampa area.

Example:

Take a file box and fill it with 52 index cards (one card for each week).

On each card, record the PM tasks should be performed that particular week, using the information from your detailed inspection, including any manufacturer's special procedures and special tools, and noting any important safety issues.

Some tasks will be listed on multiple cards and done several times a year. For example, changing HVAC filters. If you change them four times a year, the task will appear on four cards, one for each week when the filters will be changed.

If you inspect your boilers thoroughly twice a year, you will have two cards in your file box telling you the week to do your boiler inspection.

Some items, like roofing, are inspected thoroughly only once a year so there will only be one card with roof inspection on it.

Reference: See the Toolbox for a sample preventive maintenance schedule.

Helpful resources

The maintenance manuals provided by equipment manufacturers are invaluable when trying to create a maintenance schedule. The procedures in these manuals should be reviewed to determine if additional tests, repairs or inspections should be added which reflect the special use of the equipment in your facility. Warranties should also be kept on file.

Inventory records

It is important to keep inventory records. Should a theft occur, you would have the information you need to submit a claim to the insurance company.

You might consider having an engraver to engrave the property name on all tools and equipment.

Developing a Preventive Maintenance Program, Continued

Tickler file

A tickler file contains the use and care manual for every appliance, the equipment manufactures specifications of what type and how often PM should be performed, and all related information.

Each week, on Monday, management photocopies and staples a copy of that week's PM tasks file card and a copy of the tickler file information to the weekly PM work order.

Once PM is completed and inspected, written records are kept of the results and results are forwarded off-site and follow-up if necessary.

By mid-week, management follows up to ensure that the PM for that week has been started or to get a projection of when it will be done that week.

Combining PM with regular maintenance

It is a good idea to combine PM with other regularly-scheduled maintenance tasks.

Example: Pest control is professionally performed in each apartment unit every three months (quarterly). You can combine the routine quarterly apartment inspection with HVAC filter change (which should also be done at a minimum of every quarter) with the pest control service. The maintenance technician or staff person visits each apartment with the pest control technician.

By doing this, you:

- set a clear date that maintenance will visit each apartment for a quick inspection;
- ensure that each A/C filter is changed on time;
- provide supervision of the pest control technician, making sure the job is done safely; and
- correctly retain tighter key control. (The maintenance technician or staff person locks and unlocks the doors).

Assigning Personnel to Complete the Work

Onsite staff vs vendors

Once inspections have been made and the maintenance schedule is prepared, the Manager and Maintenance Supervisor must decide who will do the work.

Sometimes decisions must be made regarding whether to use the onsite maintenance staff or an outside company or service for certain preventive maintenance activities.

In general, the Manager will want to work with the onsite staff to retain control of expenses.

Tasks that onsite staff can do

Assigning personnel to a service schedule requires knowledge of each Maintenance Technician's skill level. The onsite Manager should be familiar with personnel skill levels so that the Manager is generally aware of who is likely to be assigned to what task by the Maintenance Supervisor.

Tasks that outside vendors can do

Outside vendors can do:

- exterior painting
- brickwork
- carpentry
- concrete and driveway repairs and
- turn services (painting, carpet shampoo or installation)

Tasks that require a licensed expert

There are certain maintenance tasks in a multifamily housing operation for which a licensed service expert may be required by state/local or federal regulations to get equipment in operating condition or to perform scheduled preventive maintenance activities throughout the year.

These include:

- ceptral air conditioning
- elevators
- swimming pool
- pest control
- landscaping and
- snow removal

Monitoring the Preventive Maintenance Program

be done

What needs to The Manager and Maintenance Supervisor need to:

- monitor the maintenance work being performed, and
- keep preventive maintenance records to make sure the work is inspected.

Ways to monitor the work

The work can be monitored by:

- creating and submitting a written maintenance report to the Maintenance Supervisor at the beginning of the month and reviewing the monthly service schedule at the end of the month
- meeting with the Maintenance Supervisor on a regular basis to discuss PM progress
- using one-on-one or group discussions with the maintenance staff to identify opportunities for improvement
- inspecting the property/equipment with the maintenance supervisor, and
- comparing budgeted expenses to actual.

Ways to keep records

When inspections are made, the preventive maintenance schedule can be filled in to show the date and any comments you have. Similarly, the landscaping report can be completed. Each month, the monthly PM report can be used to record the date that each task was completed.

Reference: See the Toolbox for samples of a preventive maintenance schedule, landscaping report and monthly preventive maintenance report.

Preventive maintenance file

A preventive maintenance (PM) file should be created to keep track of all PM work.

What should be kept in the file

PM information that should be contained within this file includes:

Equipment information

- Serial/model number
- Date of purchase
- Warranty
- Manufacturers PM requirements

Monitoring the Preventive Maintenance Program, Continued

What should be kept in the file, (continued)

PM records

- Termite and pest control inspection records
- Preventive maintenance needs
- Records of maintenance actions
- PM schedule
- Staff information
- Name of person who performed the work
- · Length of time it took to complete the work
- Manager's notes

How information should be filed

Information should be filed according to how often the maintenance needs to be performed.



Conservation

What you can conserve

Managers can add value by taking advantage of opportunities that conserve:

- time
- money and
- resources

One method used to conserve resources is retrofitting, which when completed will also save time and money.

Definition: retrofitting

<u>Retrofitting</u> is replacing worn, older less efficient parts and equipment with newer energy saving models.

Benefits of retrofitting

Retrofitting is conducted for several reasons. The five (5) most common reasons are to:

- 1. enhance the value of the property
- 2. better serve the residents
- 3. reduce operating costs
- 4. lengthen the time between service calls and
- 5. conserve energy and resources

Other ways to decrease water usage

More retrofits

In addition to replacing showerheads, other retrofits can decrease water use while delivering water in a manner satisfactory to your residents: Consider:

low-flow faucet aerators

Stop leaks

The number one way to save water is to stop leaks! As aerators are placed in faucets, seals can be checked and replaced providing a double benefit.

Conservation, Continued

Incentives to replace toilets/washing machines

Although your budget may not allow for purchases of such devices, some municipalities and public water authorities offer apartment communities incentives and rebates to replace old toilets with Ultra-Low Flush Toilets (ULFTs). These toilets can save 10 to 20 gallons of water per toilet per day!

Many programs also include replacements of in unit and laundry clothes washers as well. Still others offer your residents conservation kits containing the aerators, showerheads and displacement devices already mentioned.

Other energy smart practices

Thermostats

Programmable/Set Back thermostats can be installed in offices, clubhouses, fitness centers, and laundries. Locked covers should be installed and management should set the desired temperature levels for the various times of the day.

Lighting

Motion detectors, photocells, and times for lighting systems can also control energy use.

Insulation

Checking insulation adequacy and adding more can save money.

HVAC

HVAC coils, evaporator, and condensers should be cleaned annually. Filters should be changed quarterly.

Light bulbs

Energy efficient bulbs should be installed in lamps in hallways and models.

Water heaters

Water heaters should be turned off at the breaker.

Irrigation system

Regularly check (weekly in season) the property's irrigation system. Check clock functioning that controls time of day and amount of water. Make sure rain sensors work so you are not watering when it is raining. Perform monthly inspections looking for leaks, broken heads, misaligned nozzles, and missing valve box lids.

Conservation

Why Green Property Management?

Buildings across the nation waste enormous amounts of energy and resources:

- 72 percent of electricity
- 38.9 percent of generated energy
- 40 percent of raw materials
- 13.6 percent of potable water

Green property management can help you:

- efficiently use energy, water and other resources;
- reduce costs for operations and maintenance;
- extend equipment life;
- increase cash flow, profitability and asset value.

Recognition as a Socially Responsible Property

While customer service remains king, renters are looking increasingly for eco-friendly apartments with features such as recycling programs; ENERGY STAR-rated appliances; LED and compact fluorescent lighting; low E-type glass; low-flow water conserving plumbing fixtures; low-emissions paint; and dedicated green spaces. This growing demand for green properties offers properties an opportunity to increase revenues.

What Makes a Property Green?

Many states and localities have adopted green building standards based on metrics developed by private sector organizations. Two of the green building metrics utilized are Leadership in Energy and Environmental Design (LEED) developed by the US Green Building Council (USGBC) and National Green Building Standard (NGBS) developed by the National Association of Home Builders (NAHB).

LEED main credit categories include:

- sustainable sites
- water efficiency
- energy and atmosphere
- materials and resources
- indoor environmental quality
- smart location and linkage
- green infrastructure and buildings

neighborhood pattern and design

Learn more about LEED at www.usgbc.org.

NGBS certifies performance in six key areas:

- site design
- resource efficiency
- water efficiency

- energy efficiency
- indoor environmental quality
- building operation and maintenance

Learn more about NGBS at www.nahbgreen.org.

The differences in these certification programs highlight the need for uniform green standards. To address the growing need for uniform green building standards, the National Apartment Association and the National Multi Housing Council released the International Green Construction Code Adoption toolkit in 2012. The toolkit is designed to assist code officials as they consider adoption of green building guidelines.

Does Green Building Cost More?

There is a general perception that green comes at a cost. This perception may not always be true. In the case of new construction, costs for green buildings may run less than five percent more than conventional methods. However, the savings from significantly lower operational costs may offset these higher construction costs. According to a report by the US General Services Administration, green buildings have 13 percent lower maintenance costs and consume 26 percent less energy.

Low-Cost Green Best Practices

Everyone is talking about the benefits of green buildings, but what do you do if you have a 22-year-old property and don't have the capital to finance green improvements or upgrades? We will examine some of the many green practices that can be readily implemented without a significant capital investment. Practices covered include:

- energy efficiency
- indoor environmental quality
- resource efficiency
- water conservation

Green Starts with Energy Efficiency

Utility costs alone represent the single largest controllable cost of an apartment building, typically accounting for 25 percent to 35 percent of its total operating expenses. Reducing energy use by 15 percent in an average 250-unit apartment community can increase asset value by over \$1 million.

Ten Best Practices to Save Energy

According to the DOE, best operation and maintenance practices can reduce energy consumption by 5 percent to 20 percent *without* a significant capital investment:

- 1. Set goal to reduce energy usage the goal should be written, clearly defined, and measurable.
- 2. Track performance –track utility usage to monitor progress toward energy goal.
- Weatherization basic weatherization measures include insulating walls, crawl spaces, and attics; sealing and weatherstripping around window and door frames; and sealing duct systems.
- 4. Change air filters a dirty filter wastes energy.

- 5. Programmable thermostats installing a programmable thermostat is one of the easiest ways to save energy and efficiently manage cooling and heating.
- 6. Use equipment automatic controls –review and adjust any on-off controls such as programmable and mechanical time clock settings, set points, lighting photocells, and occupancy sensors.
- 7. Repair leaks repairing leaks will save both water and energy for hot water heating.
- 8. Seal duct systems the DOE estimates that sealing ducts can improve efficiency by 20 percent.
- 9. Tune-up HVAC, boilers, and building systems building equipment should be tuned up annually, just as you would tune up an automobile to get the best performance.
- 10. Conduct a walk-through or self-assessment energy audit to identify obvious defects that contribute to energy waste

Self-Assessment Energy Audit Guide

- Check for indoor air leaks, such as gaps along the baseboard or edge of the flooring and at junctures of the walls and ceiling.
- Check for gaps around pipes and wires, electrical outlets, foundation seals, and mail slots.
- Check to see if the caulking and weather stripping are applied properly, have no gaps or cracks, and are in good condition.
- Inspect windows and doors for air leaks:
 - Check for rattling frames.
 - Check for daylight around door or window frames.
 - Check the storm windows to see that they fit and are not broken.
- On the outside, inspect all areas where two different building materials meet:
 - All exterior corners.
 - Where siding, brick, stucco meet.
 - Areas where the foundation and the bottom of exterior brick or siding meet.
- Check for holes or penetrations for faucets, pipes, electrical outlets, and wiring.
- Check for cracks and holes in the mortar, foundation, and siding.
- Check the exterior caulking around doors and windows, and see whether exterior storm doors and primary doors seal tightly.
- Check to see that areas above condition spaces (attics) have adequate insulation.
- Check to see that the attic hatch is insulated and has weather sealing.
- Determine whether openings for items such as pipes, ductwork, and chimneys are sealed.
- Check to see if there is a vapor barrier under the attic insulation:



- The vapor barrier might be tarpaper, Kraft paper attached to fiberglass batts, or a plastic sheet.
- If there does not appear to be a vapor barrier, you might consider painting the interior ceilings with vapor barrier paint. This reduces the amount of water vapor that can pass through the ceiling.
- Large amounts of moisture can reduce the effectiveness of insulation and promote structural damage.
- Make sure that the attic vents are not blocked by insulation.
- Check exterior walls for insulation by removing outlet cover plates:
- Make sure the circuit breaker is turned off and the outlet is not "hot" before removing the cover plate.
- Check to see if unheated areas under the living area flooring are insulated.
- Check to see if foundation walls in heated basements are insulated.
- Check to see if water heater, hot water pipes, and furnace ducts are insulated.
- Have a professional check and clean HVAC equipment once a year.
- Check filters and replace them as recommended by the manufacturer. Generally, filters should be changed once every month, especially during periods of high usage.
- Check ductwork for dirty streaks near seams; these indicate air leaks.
- Check for insulation on any ducts or pipes that travel through unheated spaces.

Indoor Environmental Quality (IEQ)

According to the EPA, Americans spend approximately 90 percent of their time indoors. Research indicates that the air inside buildings can be more polluted than the outdoor air.

Control the Sources of Pollutants

There are numerous pollutants in building materials and chemicals that diminish indoor air environmental quality (IEQ). Controlling the sources of these pollutants is the most effective method for improving IEQ. Some common sources of pollutants are:

<u>Asbestos</u> – Asbestos is a mineral fiber that was used commonly in a variety of building construction materials for insulation and as a fire retardant. It is most commonly found in older homes, in pipe and furnace insulation materials, floor tiles, ceiling and wall finishes.

To reduce exposure do not cut, rip, or sand asbestos-containing materials. Use a certified contractor if asbestos will be disturbed or requires removal.

<u>Biological Contaminants</u> – Biological contaminants include bacteria, molds, mildew, and viruses. Biological contaminants can be distributed through

buildings by central air-handling systems.

Exposure to biological contaminants can be reduced by:

- Venting exhaust fans to the outdoors.
- Controlling the level of building moisture.
- Tearing out building absorbent materials that have been wet for twenty-four hours or more.
- Not installing porous or absorbent materials in areas exposed to moisture such as below-grade rooms and janitor closets.

<u>Carbon Monoxide, Nitrogen Dioxide, and Particles</u> – The burning of fuels creates carbon monoxide and nitrogen dioxide.

To reduce exposure:

- Ventilate combustible gases to the outdoors.
- Install carbon monoxide (CO) detectors
- Keep burners properly adjusted, flame should burn blue
- Never use a gas stove to heat a space or room
- Annually inspect furnaces, flues, and chimneys

<u>Carpeting</u> – New carpet can be a source of chemical emissions. Carpet emits volatile organic compounds, as do products that accompany carpet installation such as adhesives and padding.

To reduce exposure:

- Ask the installer to unroll and air out the carpet in a well-ventilated area. Most fumes will evaporate with forty-eight to seventy-two hours.
- Use window fans or other mechanical ventilation equipment to exhaust carpeting fumes to the outdoors during and after installation.
- Specify the use of low-emission adhesives.
- Specify carpet with the Carpet and Rug Institute's (CRI) Green Label, if possible.

Environmental Tobacco Smoke (ETS) – ETS is the mixture of smoke that comes from the burning end of a cigarette or cigar, or the tobacco in a pipe, and the smoke exhaled by the smoker. ETS is often referred to as "secondhand smoke" and exposure to it is often called "passive smoking."

To reduce exposure:

- Do not permit smoking indoors to eliminate ETS.
- If smoking is permitted indoors, designate a sealed smoking area.
- Do not allow smoking outside near entrances, windows or airintakes.

<u>Lead</u> – Lead affects practically all systems within the body. Exposure to lead can come through the air, drinking water, food, lead-based paint, and contaminated soil.

To reduce exposure:

- Leave lead-based paint undisturbed if it is in good condition.
- Do not sand or burn off paint that may contain lead and do not remove lead paint yourself.
- Find out about lead in drinking water.
- Adhere to EPA guidelines effective April 22, 2010.

<u>Pesticides</u> – In 1990, the American Association of Poison Control Centers reported that some seventy-nine thousand children were involved in common household pesticide poisonings or exposures.

To reduce exposure:

- Use non-chemical methods of pest control such as traps.
- Do not store unneeded pesticides inside the home.
- Apply only as directed.
- Ventilate areas well after pesticide use
- Dispose of pesticides safely.

Radon – Radon is the second-leading cause of lung cancer in the United States. Radon is a radioactive gas formed in the decay of uranium. You can't see, smell, or taste radon. It can be found in ground and well water.

To reduce exposure:

- Test for it. Test kits are available from local hardware supply stores or testing can be completed by a certified professional.
- Mitigation can be as simple as sealing crawl spaces and venting crawl space air to the outside.

<u>VOCs</u> – VOCs are widely used as ingredients in household products including paints, varnishes, wax, household adhesives, sealants, cleaners, disinfectants, cosmetics, degreasers, fuels, hobby products, and dry cleaning chemicals.

For more information on environmental pollutants and steps you can take to reduce exposure visit the EPA: An Introduction to Indoor Air Quality/Improving Indoor Air Quality at www.epa.gov/iag/is-imprv.html.

Resource Efficiency

Buildings and organizations use many resources and generate a lot of waste. Wasted resources are lost profits. Green buildings reduce waste, reuse materials, buy green products and recycle.

Commit to conserving resources:

- Set and communicate conservation and recycling goals. You are more likely to achieve goals if they are written, clearly defined, measurable, and communicated.
- Educate staff members and tenants on the need for conservation practices. Awareness can be an effective means for influencing behaviors.
- Designate a staff member or committee to champion your

- conservation goals.
- Incorporate conservation practices into operating procedures and performance expectations.
- Start a suggestion and incentive system to encourage conservation practices.
- Start a "conservation" column in your building's newsletter.
- Use signs and placards that promote conservation and recycling habits.

Reduce office waste:

- Turn off lights and computers when not in use.
- Reduce paper use by printing less and by making double-sided copies.
- Cancel unread magazine subscriptions and newsletters
- Skip bottled water—bring a reusable water bottle to work.
- Using durable, reusable products rather than single-use materials is one of the of the most effective-waste prevention strategies. For example, using ceramic mugs in place of disposable cups.
- When ordering supplies, ask if surplus or unused materials can be returned.
- Reuse common items such as file folders and envelopes.
- Be cautious about ordering large quantities of an item to receive a discounted unit price. Sometimes only a portion of the order ends up being used.
- Eliminate unnecessary products—there may be supplies that are routinely used that contribute little or nothing to work progress.
- Reduce e-waste—keep your cell phones, computers, and other electronics as long as possible. In 2007, discarded electronics totaled about 2.5 million tons.

Buy Green - Green Product Identification Systems

Several national organizations have developed labeling or certification systems for green products. Some of these organizations include:

ENERGY STAR Qualified – ENERGY STAR is a joint program of the EPA and the U.S. Department of Energy (DOE). Products in more than sixty categories are eligible for the ENERGY STAR.

<u>Green Seal</u> – Green Seal certifies building materials, cleaning supplies, paper products, fleet vehicle maintenance products, and more.

<u>FSC</u> – The Forest Stewardship Council (FSC) certifies that wood and paper products were created in a manner that does minimal damage to forest ecology and neighboring local economies.

<u>Green Label</u> – The Carpet and Rug Institute (CRI) launched its Green Label program to test carpeting, cushions, and adhesives to help identify products with very low emissions of VOCs.

GREENGUARD - Certifies products in a wide range of categories including

bedding, building materials, cleaning products, office equipment, and furniture.

<u>EcoLogo</u> – Founded by the government of Canada but now recognized worldwide. It certifies products in a large variety of categories.

<u>Green-e</u> – Green-e offers certification and verification of renewable energy and greenhouse gas mitigation products.

These labeling systems may complete a Life Cycle Assessment (LCA) or similar type of evaluation process to determine the relative "greenness" of a material or product. In a strict sense, an LCA is a quantitative analysis of the economic and environmental impact of a product over the entire life cycle.

Independent Third-Party Verification

In some cases, products undergo certification evaluations based on widely recognized standards established by:

American National Standards Institute (ANSI); International Organization for Standards (ISO); and American Society for Testing and Materials (ASTM).

In addition to green product labeling, look for products with characteristics such as:

- Labeled "low VOC" or "zero VOC."
- Products with identifiable postindustrial and postconsumer recycled content.
- Products made from natural, plentiful, or renewable materials.
- Products manufactured using resource-efficient processes that minimize material, energy, and water waste.
- Materials extracted and manufactured locally.
- Materials salvaged, refurbished, or remanufactured such as old doors, flooring, and concrete.
- Products that can be easily dismantled and reused or recycled.
- Recycled or recyclable product packaging.
- Products which are more durable than similar conventional products.

Recycle

For a recycling program to be successful, it is very important to make it as easy as possible for tenants to recycle items:

- Locate recycling bins near trash containers. This will encourage recycling and cut down on "dumping" of trash in recycling bins.
- Make sure recycling bins and recycling areas are accessible for persons with disabilities.
- Clearly label recycling containers.
- Keep recycling areas and containers clean and free of odors.
- Monitor for pests.

Blue is the New Green – Water Efficiency

Trends indicate that water will become a scarce resource over the coming decades. Water is vital to our survival, sustains all life, and is limited in supply. Less than one percent of the planet's water is available for human use:

- Approximately 349 billion gallons of fresh water are withdrawn from rivers, streams, and reservoirs each day.
- Buildings account for nearly 14 percent of freshwater consumption.
- Nearly one-third of lakes, streams, and rivers are unsafe for swimming or fishing.

The Water and Energy Connection

Electricity production from fossil fuels and nuclear energy is responsible for 41 percent of all freshwater withdrawals in the nation. According to the National Energy Technology Laboratory, each kilowatt-hour (kWh) of thermoelectric generation requires the withdrawal of approximately twenty-five gallons of water, primarily for cooling purposes.

What is Water Efficiency?

Water efficiency is the management of potable, or drinkable, water to conserve its use and reduce water waste. There are three approaches to water efficiency:

- Utilizing water-efficient plumbing fixtures, appliances, and water system technology
- Using water-efficient landscaping
- Using water conservation practices

Water-efficient Fixtures, Appliances, Equipment, and Systems

Ultra Low-Flow Fixtures – Ultra low-flow fixtures are available that can save 20 percent or more water than fixtures that meet standard flow rates. Many of these ultra low-flow fixtures perform just as well and cost about the same as standard fixtures.

Select ultra low-flow fixtures with the EPA's WaterSense program label. The WaterSense label demonstrates that the product is water efficient and has an adequate flow. For example:

Fixture	Standard	Ultra Low-Flow
Toilet	1.6 gpf	1.28 gpf
Faucet	2.2 gpm	.8 gpm
Showerhead	2.5 gpm	1.5 gpm
Urinal	1.0 gpf	0 gpf

• High Efficiency Toilets (HETs) – Use 20 percent less water than the current federal standard, while still providing equal or superior

performance.

- Bathroom Faucets Low-flow faucets can save 30 percent on water use without sacrificing performance.
- Urinals Many urinals in use today exceed the 1992 allowable flush volume of 1.0 gallon per flush (gpf). Replacing these inefficient fixtures with low-flow urinals, labeled flushing urinals, can save between 1.0 and 4 gallons per flush.
- Waterless Urinals Waterless urinals are becoming more common. They
 rely on regular replacement of a vegetable oil-based fluid and a
 disposable cartridge to maintain performance of the sanitary trap.
- Showerheads Low-flow fixtures save nearly 25 percent over standard models. This can save 300 kWh of electricity annually.

Water Efficient Landscape

You can create a landscape that is both attractive and water efficient by incorporating water-conserving techniques into your landscape design. Some water-efficient techniques include:

- Drip systems Water is slowly and directly applied to the roots of plants, using 30 percent to 50 percent less water than a sprinkler system.
- Moisture and Rain Sensors These override an automatic irrigation controller's "on" signal when sufficient rain has fallen or soils are moist, saving water by ensuring that plants receive water only when it is needed.
- Hydrozone Group plants by water needs to reduce over- and under-watering of plants.
- Minimize Turf Lawns require a significant amount of water. Some varieties of bluegrass, the most common turf, require about forty inches of water a year to thrive. If a lawn is desired, plant a drought-tolerant grass such as buffalo grass. It requires about one-half inch of water per week during the growing season to thrive. With all lawns, use a mulching mower and set blades at three inches to reduce the amount of water needed to maintain grass.
- Soil Preparation A well-drained soil, defined as one that can absorb a half-inch of water or more per hour, helps plants set deep roots to take advantage of deep water and nutrients.
- Composting Proper soil amendments can either help a soil drain faster or more slowly. Composting also provides a slow release of putrients, reducing the need for fertilizers.
- Mulch Spreading mulch on top of soil significantly reduces the evaporation of water.
- Xeriscaping Xeriscaping means landscaping with slow-growing, drought-tolerant plants whose deep root systems maximize water use while requiring less surface watering.
 - Indigenous plants are a good choice for water- and wasteefficient landscapes; however, plants from other areas with similar climates and growing conditions can be used in Xeriscape landscaping.
 - Xeriscape plants grow more slowly, thus reducing the amount of

- trimming and waste removal.
- Xeriscape plants generally require less fertilizer and fewer pest control measures than traditional landscapes.

Water Conservation Practices

You will need to make a concerted effort to affect water usage behaviors. Here are some ideas to share with tenants on how to save water:

- Run the dishwasher only when it is full. If dishes are washed by hand, water can be saved by filling the sink or a dishpan with water rather than running the water continuously.
- Shorten showers, even by one or two minutes.
- Save water in the bathroom by turning off the faucet while brushing teeth or shaving.
- Use a broom instead of a hose to clean driveways and sidewalks.
- Capture tap water. While you wait for hot water to come down the pipes, catch the flow in a watering can to use later on houseplants.
- Save water in the laundry room by adjusting water levels in the washing machine to match the size of the load.
- Don't run the hose while washing your car. Use a bucket of water for rinsing, followed by a quick hose rinse at the end.
- Reduce outdoor water use by watering the lawn early in the morning or late in the evening.

Learn more about saving water with EPA WaterSense program by visiting: www.epa.gov/watersense/

Learn More About Green Property Management

The Credential for Green Property Management (CGPM) Course

The Credential for Green Property Management course offered by NAAEI will teach you:

- How to conduct an Energy Self-Assessment
- Best operation & maintenance practices that can save a typical apartment community an estimated 5%- 20% on energy bills without a significant capital investment
- How to reduce water consumption and use water efficiently
- How saving water saves energy
- How to develop a Green Operation & Maintenance Plan
- How to implement an Integrated Pest Management Plan
- How to get the most "green" by educating staff members and residents

This on-demand course is self-paced, so you can take as long as necessary to complete it. The course content covers:

- Green Building Principles and Practices Overview
- Energy Efficiency
- Water Efficiency

- Integrated Pest Management
- Indoor Air Quality
- Green Operations and Maintenance
- Green Site Landscaping, Xeriscape, Composting, etc.
- Green Building Systems
- Alternative Energy Sources
- Energy Star and WaterSense Programs
- Recycling and Waste Reduction
- Resident Green Education

Enroll today by visiting: www.naahq.org/education/.



Toolbox

Overview

In this Toolbox

The table below lists the documents in this Toolbox.

Topic	See Page
Maintenance Skills Checklist	Toolbox-2
Periodic Services Agreement Between Owner And Service	Toolbox-4
Provider	
Service Agreement Between Owner and Contractor	Toolbox-12
Asphalt Sealcoat Specifications	Toolbox-20
Parking Area Striping Specifications	Toolbox-23
Sample Service Request Form	Toolbox-24
Sample Service Request Summary	Toolbox-25
Sample Certificate of Insurance	Toolbox-26
Sample Property Inventory Form	Toolbox-27
Sample Preventive Maintenance Schedule	Toolbox-28
Skill Standards for Maintenance Professionals—See Online Candidate	
Resources	

Maintenance Skills Checklist

	Skill		Experience	level
		None	Some	Expert
Electrical	Rewire shorted fixtures.			
	Replace circuit breaker.			
	Operate testing meter.			
	_			
Plumbing	Replace washers.			
	Replace faucet and handles.			
	Repair ball cock assemblies.			
	Install new ball cock assemblies.			
	Remove and replace trap.			
	Remove and install/reseal toilet.			
	Solder and replace pipes.			
Hot water heaters and	General maintenance.			4/
circulating pumps				
	Install water heater.			
	Oil circulating pump.			
	Install circulating pump.			
	Flush out water heaters.			
	Replace thermocouple, heating			
	elements.			
Furnaces/wall heaters	Replace filters.			
	Clean filters.			
	Replace gas valve.	Y		
	Check/test gas valve.			
	Replace fan motor.			
	Check/test pilot generator.			
Appliances	Install oven element.			
	Install støve element.			
	Rewire stove (partial).			
	Install oven timer.			
	Install oven thermostat.			
	Recharge refrigerant.			
Garbage disposal	Free Jammed garbage disposal.			
	Replace gasket.			
	Disassemble and reassemble.			
	Rewire.			

Continued on next page

Maintenance Skills Checklist, Continued

	Skill	Experience level
	Install new disposal.	
	·	
Dishwasher	Remove impeller.	
	Install new pump.	
	Adjust timer.	
	Install new timer.	
	Install new dishwasher.	
Ceilings and walls	Repair wallboard and prepare for	
· ·	painting.	
	Install new wallboard.	
	Acoustic spraying.	
	. , ,	
Flooring	Repair sub floor.	
<u> </u>	Replace sub floor.	
	Install tile.	
	Repair carpet with patches.	
Locks/Doors	Install deadbolt.	· ·
	Replace lock cylinders.	
	Install a door jamb.	
	Hang new door.	
Pools	Backwashing.	
	Disassemble/assemble filter.	
	Clean – vacuum.	
	Replace heater.	
	Balance chemicals.	
	Replace shutoff valve.	
Sprinklers	Adjust sprinkler heads.	
	Adjust sprinkler heads. Replace sprinkler heads.	
Landscaping	Trim and prune.	
	Fertilizing.	
Glass/windows	Glass cutting.	
_	Glass installation.	
Screening	Repair with patches.	
<u> </u>	Rescreen windows/patio doors.	

Periodic Services Agreement Between Owner and Service Provider

AB	CN	lanagement, LLC		Contract Number: Community:	
	PI	ERIODIC SERVICES AGREEMEN	T BETWEEN	OWNER AND SERVI	CE PROVIDER
(the "O	wne	EEMENT is made and entered into er"). Owner owns the Property know n its Agent, (the "Agent"). Th	vnas(the "Property") located	d at , Owner shall
1.	SC A.	COPE OF WORK (See Exhibit A) The Service Provider agrees to p ("Periodic Services Agreement"), and/or attached hereto (collecti Documents") in accordance with Provider agrees to provide at its s scaffolds and hoists required to fu Work as described more particul No(s) and Exhibit(s):	including any ively referred to the Periodic color expense alfill its obligation the a	y drawings, specificat I to as the "Period c Services Agreemer all labor, materials, se ions and to properly e	ons and addenda listed ic Services Agreement of Dosuments. Service rvices, equipment, tools, secute and complete the
	B.	This Agreement represents the er and conditions required for the principle of the principle. All changes in the Work shall be by the Owner. In the absence of to have been performed as part of	oper executions e Work cons outhorized on such signed	on and completion of the isting of additions, deleted by in writing by use of Change Order, such we	he Work. The Owner or etions or other revisions. a Change Order, signed work shall be considered
	C.	This Agreement will be effective from	on, 20	00through	_, 200
2.	SE	RVICE AGREEMENT SUM			
	A	Owner agrees to pay to the Secompletion of the Work as specification of the payments according to the payments.	ecified or re	quired in the Period	actory performance and lic Services Agreement
	В.	The total Service Agreement Sum (the Agreement Sum) shall not b charges, material costs or taxes.			
	C.	Prices are good through the	_ day of	_, 20	

D. Owner may withhold any payment to the Service Provider if: there is defective Work that has not been remedied; third parties have filed claims or liens or have threatened to file claims or liens; Service Provider has failed to pay subcontractors for labor, materials or equipment; damage has been caused to the Owner or another contractor; Service Provider fails to submit an invoice as required by the terms of this Agreement; or Service Provider fails to carry out the Work in accordance with the Periodic Services Agreement Documents.

3. SERVICE PROVIDER OBLIGATIONS

- A. The Service Provider shall supervise and direct the Work using its best skills and efforts and shall perform the Work in strict accordance with the Periodic Services Agreement Documents. Service Provider warrants that unless otherwise specified, all materials and equipment incorporated in the Work will be new and of good quality and free from faults or defects. To enable the Work to be laid out and prosecuted in an orgenty and expeditious manner, Service Provider shall, before commencing the Work, submit to Owner for completing the Work during the hours of 8:00 AM and 6:00 PM, Mor coordina unless otherwise agreed to by the Owner. Service provider shall at all time Owner with respect to the scheduling, commencement and some pletion o perform the Work in a manner that will least disrupt residents on Property Provider shall require each subcontractor to be bound by this Agree to the extent of the Work performed by such subcontractor. The Service Provide grees with due diligence and without delay. The Service Provider will not lelay o interfere with any Provider shall coordinate its Work with Work of the Owner or any subcontractors. Service others performing work at the Property as Owner dire
- B. The Service Provider shall enforce strict od order among employees of the and d arrying out the Work. The Service Provider shall not Service Provider and all other persons rsons not skilled in tasks assigned to them. Owner permit employment of unfit persons wider remove an employee from the premises if reserves the right to have the S unfit or unskilled. If requested Owner all employees of the Service Provider shall wear videry showing the name of the Service Provider and the Service Provider shall employ labor and personnel in uniforms with nametags or emi name of the employee. Τ'n accordance with applicable State and Federal laws. Local,
- C. The Service Provider shall pay, when due, sales, consumer, use, FICA and unemployment compensation taxes and any other taxes due for the Work or portions thereof provided by the Service Provider.
- D. Prior to commencing the Work the Service Provider shall obtain, at its own expense, all permits and licenses and agrees to pay all royalties that may be necessary for the proper performance of this Work.
- E. The Service Provider shall give notices and comply with all building codes, local ordinances, laws, rules, regulations and orders of any public authority having jurisdiction over the Property.
- F. The Service Provider will at all times facilitate and permit the inspection of the Work by the Owner, Agent, and public authorities. The Service Provider shall not be relieved of its obligations to perform the Work because of tests, inspections, or approvals required or performed by persons other than the Service Provider. The Work shall not be accepted until the Owner, Agent and all public authorities have inspected and approved the Work and any certificates of occupancy and/or final inspection certificates that are required are issued.

- G. The Service Provider shall at all times be responsible for initiating, maintaining and supervising all safety precautions and programs in connection with the Work. It shall take all reasonable precautions for the safety of, and shall provide all reasonable protection to prevent damage, injury or loss to (1) all employees of Service Provider or any other subcontractor performing services on the Property and other persons including, but not limited to, residents or tenants of the Owner and their guests; (2) the Work and all materials and equipment used to complete the Work; and (3) other property at the site or adjacent thereto. The obligation of the Service Provider to protect shall include the duty to provide and maintain at its sole expense at the Property, suitable and sufficient guards, lights, barricades and enclosures. All damage or loss to any property caused in whole or in part by the Service Provider, its subcontractors or their agents, or anyone directly or indirectly employed by any of them, or by anyone for whose acts they may be liable, shall be remedied by the Service Provider. The Owner reserves the right at all times to halt Work that is being performed in an unsafe manner until Service Provider rectifies same.
- H. The Service Provider shall at all times keep the premises and surrounding a accumulation of waste material or rubbish caused by its performance the ork. ithin twenty-four (24) hours from the completion of any Work, or any portion vice Provider shall remove all waste material, rubbish, tools, construction equipment, linery and surplus materials from the Property, and shall leave the Work rea bu equivalent at the end of each work day. If the Service Provider fails to clean the premises, Owner may perform the clean up and the cost shall be dedusted from a ayment requests submitted by the Service Provider. Service Provider is respons for removal and proper disposal of all waste from the Work.
- Service Provider agrees to abide by the requirements of the Fair Housing Amendments Act of 1988 and will not engage in any discriminatory practices, any discriminatory language, or any act that may be deemed discriminatory by Fair Housing Law.
- J. Service Provider agrees to abide by the Department of Transportation regulation (Part 382 of Title 49 of the Code of Federal Regulations) if applicable. Service Provider agrees that any employee operating a motor vehicle at the direction of the Owner or Buckingham Management, LLC or while undertaking the business of this Periodic Services Agreement is participating in a DOT mandated and approved random drug and alcohol testing program. Failure to maintain such a program in compliance with DOT regulations would be grounds for termination of this Agreement pursuant to Article 10.
- K. All Periodic Service Providers shall execute the Equal Employment Opportunity addendum.
- The Service Provider shall hereby indemnify and hold the Owner harmless from all losses, costs, or expenses including times incurred by the Owner or Buckingham Management, LLC for the Service Provider's failure to comply with the Federal Occupational Health and Safety Act, and like State and Local requirements.

4. OWNER OBLIGATIONS

- A. The Owner shall not be responsible for or assume any liability or responsibility for loss or damage to equipment or materials, tools or other personal property whether owned or leased by the Service Provider, subcontractor, their agents, or anyone employed by them in the performance of the Work.
- B. When Work is being performed on Owner's premises where water, power, gas, and toilet facilities are available, the Owner will furnish said utilities and facilities to the Service Provider and his workmen. All scheduled uses shall be coordinated and approved by the on-site

Property Manager. Where said utilities are not available through the Owner's in-place facility, the Service Provider shall provide same at his own expense to the extent required to fulfill this Agreement.

CORRECTION OF WORK

The Service Provider shall promptly correct at its own expense any Work that fails to conform to the requirements of the Periodic Services Agreement Documents where such failure to conform appears during the progress of the Work. Service Provider warrants and shall also promptly remedy at its own expense any defects due to faulty materials, equipment or workmanship, all within such period or periods of time as may be prescribed by law or by the terms of any applicable guarantee required by the Periodic Services Agreement Documents. The provisions of this Article apply to work done by subcontractors as well as to Work done by direct employees of the Service provider.

INSURANCE

A. The Service provider shall purchase from and maintain in a company authorized to do business in the jurisdiction in which the Pro tvis lo as will protect the Service Provider and the Owner from all claim icluding, b those that may arise out of or result from operations of the S Agreement and for which the Service Provider may be legally liable her such operations be by the Service Provider or by a subcontractor or by directly employed by any of them, or by anyone for whose acts any of them be II Coverage to be provided shall include, but not be mited to, (1 omprehensive General Liability; (2) Workers' Compensation and Employer iability; and (3) Automobile Liability. Coverage to be written on an occurrence basis unts as in the

(1)	Commercial General Liability -
	\$1,000,000 for contracts under \$50,000. \$2,000,000 for contracts over \$50,000. \$5,000,000 for security contracts.
(2)	Workers' Compensation and Employers' Liability -
(2)	(Statutory) \$100,000 each accident \$500,000 disease – policy limit \$100,000 disease – each employee
(3)	Automobile Liability -
	\$1,000,000 combined single limit

- Check required amounts. If nothing is checked the maximum insurance requirements apply for each category.
- B. The Service Provider shall, concurrent with the execution of this Agreement, deliver to the Owner a Certificate of Insurance in a form acceptable to the Owner evidencing the coverage set forth by this Agreement. The Certificate of Insurance will name the Owner and Buckingham Management, LLC as additional insured. In no circumstance shall the Service Provider commence any Work without the issuance of policies for all the insurance coverage specified in this Article. The Certificate of Insurance and insurance policies shall contain a provision that coverage under the insurance policy will not be cancelled, non-renewed or reduced in coverage until after thirty (30) days prior written notice has been given to the Owner.

PREVENTION OF LIENS

The Service Provider acknowledges that no liens shall be attached to the Property by virtue of any work done hereunder by the Service Provider or by any suppliers, employees, materialmen, or other subcontractors employed by him; and the Service Provider warrants that all such parties shall be advised of same and certifies to the Owner that they are aware thereof and bound thereby.

8. INDEMNIFICATION

- A. To the fullest extent permitted by law, the Service Provider shall indemnify and hold harmless the Owner, its partners, Buckingham Management, LLC, and other officers, directors, controlling persons, shareholders, partners, employees and affiliates from and against any and all claims, damages, losses, costs and expenses whenever incurred, including, but not limited to, reasonable attorney's fees arising out of any kind and nature whatsoever including without limitation claims, damages, costs and expenses attributable to injury or destruction to tangible property, bodily injury, sickness, disease or death or resulting inaccuracy of any warranty or representation made in the Periodic Services Agreement Documents.
- B. The indemnification obligation under this Article shall not be limited by any restriction on the amount or type of damages, compensation or benefits payable by or for the Service Provider under workers' compensation acts, disability benefit acts or other employee benefit acts.
- C. All provisions of this Agreement that require the Service Provider to insure, defend or indemnify the Owner shall survive any termination of this Agreement.

OWNER LIABILITY

The Service Provider shall not bring claims or lawsuits under or related to this Agreement against any principals, employees, agents, officers, directors, stockholders, controlling persons, partners or affiliates of the Owner or Buckingham Management, LLC. The Service Provider further agrees that the sole and exclusive remedy of the Service Provider for payment and/or performance of this Agreement shall be against the assets of the Owner.

10. OWNER'S RIGHT TO TERMINATE THE AGREEMENT

- A. Should the Service Provide arry out the Work properly, correct defective Work or nealect to fail to perform any of its of gations under the Periodic Services Agreement Documents, the Owner, after thre written notice to the Service Provider and its surety, if any, may other remedy it may have, direct by written notice that the Service rejudice to ar make good the deficiencies and may deduct the cost from the rovider stop the Wo due to the Service Provider or, at the option of the Owner, may there ment and take possession of all materials, tools, and appliances and the Work by such means as the Owner sees fit. If the unpaid balance of the Agreement expense of finishing the Work, such excess shall be paid to the Service exceeds the uch expense exceeds the unpaid balance, the Service Provider shall promptly pay ti ne difference to the Owner.
- B. Notwithstanding anything in this Agreement, the Owner, at its sole discretion, may terminate this Agreement at any time without cause by giving at least ten (10) days prior written notice of such termination to the Service Provider. Upon any termination of this Agreement, and subject to all the terms and provisions of the Agreement, the Service Provider shall be entitled to payment at the Agreement Sum for all accepted Work finished or installed. However, the Owner may retain from any monies due to the Service Provider an amount sufficient to cover Service Provider's obligations under any guarantee of materials and workmanship provided in the Periodic Services Agreement Documents. Upon the expiration

of these obligations, the balance of the amount, if any, shall be paid to the Service Provider. The Service Provider, upon termination of this Agreement, shall peaceably and quietly surrender to the Owner all premises, facilities, machinery and equipment of or belonging to the Owner or for which Owner has paid the Service Provider.

MISCELLANEOUS

- A. Nothing contained in this Agreement shall be construed to create the relationship of employer and employee, principal and agent, partnership or joint venture between the parties, it being understood that the only relationship between the parties is that the Service Provider is an independent contractor of the Owner. Nothing contained in this Agreement shall create any contractual or other relationship between Owner and any subcontractor or supplier.
- B. The invalidity or unenforceability of any provision in this Agreement shall not affect or limit the validity and enforceability of any other provisions. The waiver by any party of a breach of any provision of the Agreement shall not operate or be construed as a waiver of any subsequent breach by any party. The remedies and rights of the Owner, in the event of any default by the Service Provider, are cumulative and in addition to those otherwise available by law, and the expression of any specific right or remedy shall not be construed as preventing the Owner from exercising any other right or remedy it may have.
- C. Notice required under this Agreement shall be in writing and sent by personal delivery, certified mail, commercial overnight courier (e.g., Federal Express, UPS, etc.) or certified mail postage prepaid return receipt requested to the parties at the addresses as set forth in this Agreement and to the Buckingham Management, LLC corporate office at the address set forth at the end of this Agreement, to such other addresses as any of the parties may hereafter specify in writing to the other party. Notice shall be deemed effective when received.
- D. This Agreement shall be construed in accordance with the laws of the State where the Work is to be performed.
- E. The Service Provider shall not assign this Agreement. Nothing in this Agreement shall preclude or prohibit the Owner from assigning or transferring the whole or any part of the Agreement including the Owner's rights, benefits or obligations hereunder to any corporation, partnership or individual.
- F. This Agreement and all the representations, warranties and conditions shall be binding upon and inure to the benefit of the parties and their respective heirs, executors, administrators, assigness and other successors in interest to the extent permitted by this Agreement.
- 6. Whenever the context so requires, the masculine gender includes the feminine and the neuter as appropriate and vice versa, and the singular includes the plural. Caption headings are for convenience only and are not to be used to construe or interpret the Agreement.

Specifications are attached as Exhibit

IN WITN	IESS WHEREOF, the parties have exec	uted this Agreement	as of the day of, 20
OWNER:	(Name of Partnership)	SERVICE PROVIDER:	(Print Company Name)
BY:		BY:	
	(Signature)		(Signature)
	(Print Name)		(Print Name)
	(Title)	•	(Title)
	(Witness)		(Witness)
	(Street Address)		(Street Address)
	(City/State/Zip Code)	- N	(City/State/Zip Code)
	(Telephone)		(Telephone)

	Contract Number:
	EQUAL EMPLOYMENT OPPORTUNITY
Att	ached to and made a part of the Contract by and between, Owner, and, as Contractor, dated
Du	ring the performance of this contract, the Contractor agrees as follows:
A.	The Contractor will not discriminate against any employee or applicant for employment because of race, creed, religion, color, sex, national origin or any other protected classification proscribed under local, state or federal law. The contractor will take affirmative action to ensure that applicants are employed, and that employees are treated during employment without regard to their race, creed, religion, color, sex, nation origin or any other protected classification proscribed under local, state or federal law. Such action shall include, but not be limited to, the following: employment, upgrading, demotion, or transfer, recruitment or recruitment advertising; layoff or termination; rates of pay or other forms of compensation; and selection for training, including apprenticeship. The Contractor agrees to post in conspictors places, available to employees and applicants for employment, notices to be provided by the contracting officer setting forth the provisions of this nondiscrimination clause.
В.	The Contractor will, in all solicitations or advertisements for employees placed by or on schalf of the Contractor, state that all qualified applicants will receive consideration for employment without regard to race, creed, religion, color, sex, national origin or any other protected classification proscribed under local, state or federal law.
C.	The Contractor will send to each labor union or representative of workers with which he has a collective bargaining agreement or other contractor understanding, a notice to be provided by the agency contracting officer, advising the labor union or workers representative of the Contractor's commitments under Section 202 of Executive Order 11246 of September 24, 1965, and of the rules, regulations and relevant orders of the U.S. Secretary of Labor.
D.	The Contractor will comply with all provisions of Executive Order N 246 of September 24, 1965, and of the rules, regulations, and relevant orders of the U.S. Secretary of Labor.
E.	The Contractor will furnish all information and reports required by Executive Order 11246 of September 24, 1965, and by the rules, regulations, and orders of the U.S. Secretary of Labor, or pursuant thereto, and will permit access to his books, records and accounts by the contracting agency and the U.S. Secretary of Labor for purposes of investigation to ascertain compliance with such rules, regulations and relevant orders.
F.	In the event of the Contractor's noncompliance with the nondiscrimination clauses of this Contract or with any of such rules, regulations, or orders, this Contract may be canceled, terminated or suspended in whole or in part, and such other sanctions may be imposed and remedies invoked as provided in Executive Order 11246 of September 24, 1965, or by rules, regulations or order of the U.S. Secretary of Labor, or as otherwise provided by law.
G.	The Connactor will include the provisions of Paragraph (A) through (G) in every subcontract or purchase order unless exempted by rules, regulations or orders of the U.S. Secretary of Labor issued pursuant to Section 204 of Executive Order 1124t of September 24, 1965, so that such previsions will be binding upon each contractor or vendor. The Contractor will take such action with respect to any subcontract or purchase order as the contracting agency may direct as a means of enforcing such provisions including sanctions for noncompliance; PROVIDED, HOWEVER, that in the event the Contractor becomes involved in, on is threatened with, litigation with a subcontractor or vendor as a result of such direction by the contracting agency, the Contractor may request the United States to enter into such litigation to protect the interests of the United States
	Contractor Owner
	Date: Date:



Service Agreement Between Owner and Contractor

Contract Number: 2005-BRI - 04 Community : Bradford Ridge

AGREEMENT BETWEEN OWNER AND CONTRACTOR

THIS AGREEMENT is made and entered into by and between <u>Lentz Asphalt & Excavating Co.</u> (the "Contractor") and Bloomington Housing Associates, L.P. (the "Owner"). Owner owns the Property known as <u>Bradford Ridge Apartments</u> (the "Property") located at <u>2900 Ridge Road, Bloomington IN, 47403</u> The Owner and Contractor agree as follows:

SCOPE OF WORK (See Exhibit A)

- A. The Contractor agrees to perform the Work and services required by this Agreement, including any drawings, specifications and addenda listed and/or attached hereto (collectively referred to as the "Contract Documents") in accordance with the Contract Documents. Contractor agrees to provide at its sole expense all labor, materials, services, equipment, tools, scaffolds and hoists required to fulfill its obligations and to properly execute and complete the Work as described under particularly on the attachments (the "Work") per Specification(s) No(s). and Exhibit(s): A.
- B. This Agreement represents the entire Agreement between the parties and condains all terms and conditions required for the proper execution and completion of the Work. The Owner or his Agent may order changes in the Work consisting of additions, deletions or other revision. All changes in the Work shall be authorized only in writing by use of a Change Order, signed by the Owner. In the absence of such signed Change Order, such work shall be considered to have been performed as part of the original Agreement without additional compensation.
- C. Contractor shall commence work on May 11, 2005 Contractor shall prosecute the Work diligently and the Work is to be fully completed by June 11, 2005 (Date of Final Completion). Time is of the essence.
- D. In the event the Contractor fails to com y the Date of Final Completion stated in Article 1. C., then liquidated dama ne Hundred and no/100 Dollars (\$100.00) the amount per day shall be assessed by the Own for each day or portion of a day of delay inst the Con beyond the Date of Final Completion. fixed liquidated damages are not established as a penalty, the Owner and the Contractor due to the uncertainty but are calculated and ag in adv he actual and consequential damages which may be and impossibility of m incurred by the Own he part of the Contractor to complete the Work on s a resul time in accordance nts. The liquidated damages stated herein shall be the contra NLY ustained by the Owner due to breach by the Contractor of asure of se dan k. This liquidated damages subsection shall not alter or it to complete ly the V ffect adversely the Owner sess damages against the Contractor for loss resulting from causes OTHER ontractor in timely completion of the Work. de1

2. CONTRACT SUM

A. Subject to Article 1. D. Owner agrees to pay to the Contractor for the full satisfactory performance and completion of the Work as specified or required in the Contract Documents, the sum of Twenty Seven thousand Three Hundred Twenty Five Dollars and 00/100 Dollars (\$27,325.00). This amount (the Contract Sum) shall not be increased by any changes in labor rates, transportation charges, material costs or taxes.

Payment is to be made as follows. Asphalt repairs will be completed and billed for payment, amount will be \$20,000 and will be paid within 30 days of invoice date and upon acceptance of Director of Technical Services, less applicable retainage. Remainder of contracted amount will

be billed upon completion, \$7,325.00. Payment of remainder will be paid within 30 days of invoice date, less applicable retainage.

Any payments due under this Agreement will be made no more than once a month and no later than the twenty-fifth (25th) day of each month for Work completed the previous month. To receive any payment, the Contractor must submit to the Owner an invoice detailing the labor, services or materials already provided for Work performed in the previous month on or before the first day of the following month. By submission of an invoice for payment, the Contractor warrants that all Work performed for the Owner by the Contractor to that date is free and clear of liens, claims, security interests or encumbrances from persons or entities providing labor, materials and equipment relating to the invoiced Work. No payment shall be made for equipment or materials that have not yet been installed on the Property.

C.	A sum equal to X Ten Percent (10%) or Two Thousand Seven Hundred Thirty Two Dollars and
	50/100 (\$2,732.50) of the Contract Sum will be retained by the Owner. The final payment, including
	release of retainage, shall be paid by Owner within 30 days after final completion of the Work and its
	acceptance by the Owner or Agent, provided first, however, that Contractor shall have fulfilled at the
	obligations to be performed by Contractor under this Agreement.
	Contractor's initials Agent's initials

- D. Unless waived by Owner in writing, the Contractor agrees to provide waivers and releases of liens from the Contractor and all subcontractors and suppliers of Work under this Agreement (the "Release Documents") and any other evidence in a form satisfactor; to the Owner demonstrating that all labor, materials, bills, invoices, payroll taxes of any kind and any other indebtedness incurred by the Contractor up to and including the date of invoicing have been paid in full prior to or in exchange for final payment to Contractor.
- E. Owner may withhold any payment, including ge, to t tractor: if there is defective Work that has not been remedied; if third parties have claims r liens or have threatened to file claims or liens; if the Contractor has faile ers for lab materials or equipment; if pay subcont damage has been caused to the Own contractor, if Contractor fails to submit an invoice as of and required by the terms of this Agree nent; or if gactor fails to carry out the Work in accordance with the Contract Documents.

3. CONTRACTOR OBLIGATIONS

- d direct the Work using its best skills and efforts and shall perform The Contractor shall supervisit the Work in strict a with the Contract Documents. Contractor warrants that unless otherwise ordan equipment incorporated in the Work will be new and of good quality and To enable the Work to be laid out and prosecuted in an orderly and from faults or defec all, before commencing the Work, submit to Owner a schedule for expeditious manner, Con the hours of 8:00 AM and 6:00 PM, Monday through Friday, unless the Owner. Contractor shall at all times coordinate with Owner with respect to reduling, commencement and completion of the Work and perform the Work in a manner that will least disrupt residents on the Property. The Contractor shall require each subcontractor to be eement to the extent of the Work performed by such subcontractor. The Contractor erform the Work with due diligence and without delay. The Contractor will not delay or interfere with any Work of the Owner or any subcontractors. Contractor shall coordinate its Work with others performing work at the Property as Owner directs.
- B. The Contractor shall enforce strict discipline and good order among employees of the Contractor and all other persons carrying out the Work. The Contractor shall not permit employment of unfit persons or persons not skilled in tasks assigned to them. Owner reserves the right to have the Contractor remove an employee from the premises if unfit or unskilled. If requested by Owner, all employees of the Contractor shall wear uniforms with nametags or embroidery showing the name of the Contractor

- and the name of the employee. The Contractor shall employ labor and personnel in accordance with applicable Local, State and Federal laws.
- C. The Contractor shall pay, when due, sales, consumer, use, FICA and unemployment compensation taxes and any other taxes due for the Work or portions thereof provided by the Contractor.
- D. Prior to commencing the Work, the Contractor shall obtain, at its own expense, all permits and licenses and agrees to pay all royalties that may be necessary for the proper performance of this Work.
- E. The Contractor shall give notices and comply with all building codes, local ordinances, laws, rules, regulations and orders of any public authority having jurisdiction over the Property.
- F. The Contractor will at all times facilitate and permit the inspection of the Work by the Owner, Agent, and public authorities. The Contractor shall not be relieved of its obligations to perform the Work because of tests, inspections, or approvals required or performed by persons other than the Contractor. The Work shall not be accepted until the Owner, Agent and all public authorities have inspected and approved the Work and any certificates of occupancy and/or final inspection derificates that are required are issued.
- G. The Contractor shall at all times be responsible for initiating, maintainin and st precautions and programs in connection with the Work. It shall take all is for the nable safety of, and shall provide all reasonable protection to prevent da er loss to (1) all mage, in employees of Contractor or any other subcontractor perform perty and other persons including, but not limited to, residents or tenants the Owner their and all materials and equipment used to complete the and (3) other operty at the site or adjacent thereto. The obligation of the Contractor to pro shall include th e duty to provide and maintain at its sole expense at the Property, suitable nt guard lights, barricades and and suf enclosures. All damage or loss to any proper in who by the Contractor, its subcontractors or their agents, or anyone directly or in tly en ed by any of them, or by anyone nedied by for whose acts they may be liable, shall be The Owner reserves the right at all times to halt Work that is being til Contractor rectifies same. med in an unsa anner ur
- H. The Contractor shall at all times the premi d surrounding area free from accumulation of waste material or rubbish caused b performance of the Work. Within twenty-four (24) hours from the completion of any Wa rtion of Work, the Contractor shall remove all waste material, or any p rubbish, tools, constra hinery and surplus materials from the Property, and shall ment, n its equiva leave the Work area ent at the end of each work day. If the Contractor fails orm the clean up and the cost shall be deducted from any to clean the premis Own actor. Contractor is responsible for removal and proper all waste from ne Wor
- Contractor agrees to abide by the requirements of the Fair Housing Amendments Act of 1988 and will not engage in any discriminatory practices, any discriminatory language, or any act that may be deemed discriminatory by Fair Housing Law.
- J. Contractor agrees to solide by the Department of Transportation regulation (Part 382 of Title 49 of the Code of Federal Regulations), if applicable. Contractor agrees that any employee operating a motor vehicle at the direction of Buckingham Management, LLC or while undertaking the business of this Contract is participating in a DOT mandated and approved random drug and alcohol testing program. Failure to maintain such a program in compliance with DOT regulations would be grounds for termination of this Agreement pursuant to Article 10.
- K. All Contractors shall execute the Equal Employment Opportunity addendum.

- L. Contractor guarantees that all Work shall be free from defects in workmanship and materials for minimum period of <u>One Year</u> from date Owner accepts the Work and promptly upon Owner's request, Contractor will correct by repair or replacements, without charge, any such defects (and any damage to other property, including without limitation the Work of other subcontractors resulting therefrom or from the correction thereof) which may appear in the Work during that period. Additionally, materials and/or equipment warranties provided by the manufacturer of said materials and/or equipment is to be for a period of <u>One Year</u>. Where any governmental bodies or agencies regulating the Owner's operations, such as the United States Department of Housing and Urban Development, require guarantees and/or warranties beyond said periods, the Contractor's obligations shall remain in effect through such extended period of time. If the Contractor fails to commence and to complete the repair or replacement of improper or defective Work, as specified, within a reasonable period of time as determined by the Owner, the Owner may proceed to have such Work completed by whatever method it may deem expedient and may charge the Contractor for the expense incurred.
- M. The Contractor will be responsible to protect living units against the elements at the end of each working day and under no circumstances shall any living unit be left unprotected due to Work under the Agreement. In addition, no occupied living unit will be without essential services such as heat, light, and water at the end of each working day as a result of this Work.
- N. The Contractor shall hereby indemnify and hold the Owner harmless from all losses, costs, or expenses including fines incurred by the Owner for the Contractor's failure to comply with the Federal Occupational Health and Safety Act, and like State and Local requirements.

4. OWNER OBLIGATIONS

- A. The Owner shall not be responsible for or assume any liability or responsibility for loss or damage to equipment or materials, tools or other personal property whather owned or leased by the Contractor, subcontractor, their agents, or anyone employed by them in the performance of the Work.
- B. When Work is being performed on Owner's premises where water, power, gas, and toilet facilities are available, the Owner will furnish said utilities and facilities to the Contractor and his workmen. All scheduled uses shall be coordinated and approved by the on-site Property Manager. Where said utilities are not available through the Owner's in-place facility, the Contractor shall provide same at his own expense to the extent required to fulfill this Agreement.

5. CORRECTION OF WORK

The Contractor shall promptly correct at its own expense any Work that fails to conform to the requirements of the Contract Documents where such failure to conform appears during the progress of the Work Contractor warrants and shall also promptly remedy at its own expense any defects due to faulty materials, equipment or workmanship, all within such period or periods of time as may be prescribed by law or by the terms of any applicable guarantee required by the Contract Documents. The provisions of this Article apply to work done by subcontractors as well as to Work done by direct employees of the Contractor.

6. INSURANCE

A. The Contractor shall purchase from and maintain in a company or companies lawfully authorized to do business in the jurisdiction in which the Property is located such insurance as will protect the Contractor and the Owner from all claims including, but not limited to, those that may arise out of or result from operations of the Contractor under this Agreement and for which the Contractor may be legally liable whether such operations be by the Contractor or by a Subcontractor or by anyone directly or indirectly employed by any of them, or by anyone for whose acts any of them may be liable. * Insurance Coverage to be provided shall include, but not be limited to, (1) Comprehensive General Liability; (2) Workers' Compensation and Employers' Liability; and (3) Automobile Liability. Coverage to be written on an occurrence basis, in the amounts as follows:

(1) Commercial General Liability
| XXX | \$1,000,000 for contracts under \$50,000. |
| \$2,000,000 for contracts over \$50,000. |
| \$5,000,000 for security contracts.

(2) Workers' Compensation and Employers' Liability | X | (Statutory) |
| \$100,000 each accident

\$500,000 disease - policy limit \$100,000 disease - each employee

(3) Automobile Liability -

X \$1,000,000 combined single limit

- Check required amounts. If nothing is checked the maximum insurance requirements apply for each category.
- B. The Contractor shall, concurrent with the execution of this Agreement, deliver to the Owner a Certificate of Insurance in a form acceptable to the Owner evidencing the coverage set forth by this Agreement. The Certificate of Insurance will name the Owner and Buckingham Management, LLC as additional insured. In no circumstance shall the Contractor commence any Work without the issuance of policies for all the insurance coverage specified in this Article. The Certificate of Insurance and insurance policies shall contain a provision that coverage under the insurance policy will not be cancelled, non-renewed or reduced in coverage until after thirty (30) days prior written notice has been given to the Owner.

7. PREVENTION OF LIENS

The Contractor agrees to pay when done all claims o subcontractors and others for labor, materials, services fork and to prevent the filing of any liens by mechanics or or equipment for the performance of suits affecting title to the Property upon which the Work is materialmen or attachments, garnishmen performed. The Contractor githin fifteen (15) days after notice is mailed to the Contractor to cause removed from the Property and to pay all expenses for, and on any such suit or lien to be behalf of the Owner, in luding at ses incurred as a result of any suit or lien. The Contractor may, a bond in a form and substance satisfactory to the Owner to bond with the approval of the wner ovid o disputes with subcontractors, sub-subcontractors or any other person or st any loss di providing labor or mat erials to complete the Work. The Contractor further agrees that no liens or ments shall attach to the owned by the Owner by virtue of Work done by the Contractor or by paterialmen or sub-subcontractor employed by him, and the Contractor warrants advised of these terms and bound by the provisions of this Article. Failure to uties shall b with this Article shall constitute a default by the Contractor and entitle the Owner to terminate this Agreement or pursue of er appropriate remedies at law or in equity.

8. INDEMNIFICATION

A. To the fullest extent permitted by law, the Contractor shall indemnify and hold harmless the Owner, its partners, Buckingham Management, LLC, and other officers, directors, controlling persons, shareholders, partners, employees and affiliates from and against any and all claims, damages, losses, costs and expenses whenever incurred, including, but not limited to, reasonable attorney's fees arising out of any kind and nature whatsoever, including without limitation claims, damages, costs and expenses attributable to injury or destruction to tangible property, bodily injury, sickness, disease or death or resulting inaccuracy of any warranty or representation made in the Contract Documents or in the Release Documents.

- B. The indemnification obligation under this Article shall not be limited by any restriction on the amount or type of damages, compensation or benefits payable by or for the Contractor under workers or workers' compensation acts, disability benefit acts or other employee benefit acts.
- C. All provisions of this Agreement that require the Contractor to insure, defend or indemnify the Owner shall survive any termination of this Agreement.

9. OWNER LIABILITY

The Contractor shall not bring claims or lawsuits under or related to this Agreement against any principals, employees, agents, officers, directors, stockholders, controlling persons, partners or affiliates of the Owner or Buckingham Management, LLC. The Contractor further agrees that the sole and exclusive remedy of the Contractor for payment and/or performance of this Agreement shall be against the assets of the Owner.

10. OWNER'S RIGHT TO TERMINATE THE CONTRACT

- A. Should the Contractor neglect to carry out the Work properly, co defectiv form any of its obligations under the Contract Documents, the Owner, at ree (3) the Contractor and its surety, if any, may without prejudice to any other nedy i written notice that the Contractor stop the Work, make good the deficient nd may from the payment then or thereafter due to the Contractor or Owner, may terminate this Agreement and take possession of all materials, tools, the Work by such a applia and fini means as the Owner sees fit. If the unpaid balance of the Contract Sum eeds the expense of finishing the Work, such excess shall be paid to the Contractor, but if such expense exceeds the unpaid balance, the Contractor shall promptly pay the difference to the Owner.
- le discretion, may terminate this B. Notwithstanding anything in this Agreement at its Agreement at any time without cause by giving at least (10) days prior written notice of such greement, and subject to all the terms termination to the Contractor. Upon a ination of this shall be entitled to payment at the Contract Sum for and provisions of the Agreement, th 40Hib. all accepted Work finished or installed. Howe er, the Owner may retain from any monies due to the Contractor an amount sufficient er Contract obligations under any guarantee of materials and workmanship provided in the Contract Documents. Upon the expiration of these obligations, the hall be paid to the Contractor. The Contractor, upon termination of this balance of the amount pietly surrender to the Owner all premises, facilities, machinery and Agreement, shall pea nging to mer or for which Owner has paid Contractor. equipment of or be

11. MISCELLANDOUS

- A. Nothing contained in this Agreement shall be construed to create the relationship of employer and employee, principal and agent, partnership or joint venture between the parties, it being understood that the only relationship between the parties is that the Contractor is an independent contractor of the Owner. Nothing contained in this Agreement shall create any contractual or other relationship between Owner and any subcontractor or supplier.
- B. The invalidity or inenforceability of any provision shall not affect or limit the validity and enforceability of any other provisions. The waiver by any party of a breach of any provision of the Agreement shall not operate or be construed as a waiver of any subsequent breach by any party. The remedies and rights of the Owner, in the event of any default by the Contractor, are cumulative and in addition to those otherwise available by law, and the expression of any specific right or remedy shall not be construed as preventing the Owner from exercising any other right or remedy it may have.
- C. Notice required under this Agreement shall be in writing and sent by personal delivery, certified mail, commercial overnight courier (e.g., Federal Express, UPS, etc.) or certified mail postage prepaid return receipt requested to the parties at the addresses as set forth in this Agreement and to the Buckingham

Management, LLC corporate office at the address set forth at the end of this Agreement, to such other addresses as any of the parties may hereafter specify in writing to the other party. Notice shall be deemed effective when received.

- D. This Agreement shall be construed in accordance with the laws of the State where the Work is to be performed.
- E. The Contractor shall not assign this Agreement. Nothing in this Agreement shall preclude or prohibit the Owner from assigning or transferring the whole or any part of the Agreement including the Owner's rights, benefits or obligations hereunder to any corporation, partnership or individual.
- F. This Agreement and all the representations, warranties and conditions shall be binding upon and inure to the benefit of the parties and their respective heirs, executors, administrators, assignees and other successors in interest (to the extent permitted by this Agreement).
- G. Whenever the context so requires, the masculine gender includes the feminine and the neuter as appropriate and vice versa, and the singular includes the plural. Caption headings are for convenience only and are not to be used to construe or interpret the Agreement.

IN WITNESS WHEREOF, the parties have executed this Agreement as of the 9th day of May, 2005.

OWNER:		CONTRACTOR Lentz Asphalt & Excavating Co.
	(Name of Partnership)	Print Company Name)
BY: BY:	Its authorized Agent	BV:
ы.	(Signature)	(Signature)
	(Print Name)	(Print Name)
	President (Title)	(Title)
		(21115)
	(Wilder)	(Witness)
	(Street Address)	(Street Address)
	(Ciny/State/Kip Code)	(City/State/Zip Code)
	(Telephone)	(Telephone)

Specifications are attached as Exhibit A.

~*******

	Contract Number:
	EQUAL EMPLOYMENT OPPORTUNITY
Atta	ached to and made a part of the Contract by and between, Owner, and, as Contractor, dated
Du	ring the performance of this contract, the Contractor agrees as follows:
A.	The Contractor will not discriminate against any employee or applicant for employment because of race, creed, religion, color, sex, national origin or any other protected classification proscribed under local, state or federal law. The contractor will take affirmative action to ensure that applicants are employed, and that employees are treated during employment without regard to their race, creed, religion, color, sex, nation origin or any other protected classification proscribed under local, state or federal law. Such action shall include, but not be limited to, the following: employment, upgrading, demotion, or transfer, recruitment or recruitment advertising; layoff or termination; rates of pay or other forms of compensation; and selection for training, including apprenticeship. The Contractor agrees to post in conspicuous places, available to employees and applicants for employment, notices to be provided by the contracting officer setting forth the provisions of this nondiscrimination clause.
В.	The Contractor will, in all solicitations or advertisements for employees placed by or on sehalf of the Contractor, state that all qualified applicants will receive consideration for employment without regard to race, creed, religion, color, sex, national origin or any other protected classification proscribed under local, state or federal law.
C.	The Contractor will send to each labor union or representative of workers with which he has a collective bargaining agreement or other contractor understanding, a notice to be provided by the agency contracting officer, advising the labor union or workers representative of the Contractor's commitments under Section 202 of Executive Order 11246 of September 24, 1965, and of the rules, regulations and relevant orders of the LLS. Secretary of Labor.
D.	The Contractor will comply with all provisions of Executive Order N 246 of September 24, 1965, and of the rules, regulations, and relevant orders of the U.S. Secretary of Labor.
E.	The Contractor will furnish all information and reports required by Executive Order 11248 of September 24, 1965, and by the rules, regulations, and orders of the U.S. Secretary of Labor, or pursuant thereto, and will permit access to his books, records and accounts by the contracting agency and the U.S. Secretary of Labor for purposes of investigation to ascertain compliance with such rules, regulations and relevant orders.
F.	In the event of the Contractor's noncompliance with the nondiscrimination clauses of this Contract or with any of such rules, regulations, or orders, this Contract may be canceled, terminated or suspended in whole or in part, and such other sanctions may be imposed and remedies invoked as provided in Executive Order 11246 of September 24, 1965, or by rules, regulations or order of the U.S. Secretary of Labor, or as otherwise provided by law.
G.	The Contractor will include the provisions of Paragraph (A) through (G) in every subcontract or purchase order unless exempted by rules, regulations or orders of the U.S. Secretary of Labor issued pursuant to Section 204 of Executive Order 11246 of September 24, 1965, so that such provisions will be binding upon each contractor or vendor. The Contractor will take such action with respect to any subcontract or purchase order as the contracting agency may direct as a means of enforcing such provisions including sanctions for noncompliance; PROVIDED, HOWEVER, that in the event the Contractor becomes involved in order threatened with, litigation with a subcontractor or vendor as a result of such direction by the contracting agency, the Contractor may request the United States to enter into such litigation to protect the interests of the United States
	Contractor Owner
	Date: Date:

Asphalt Sealcoat Specifications

Scope of Work

Sealcoat all visible asphalt at ______Apartments.

Specifications

Preparation of existing road surface:

- a. Holes and depressions in granular surface shall be repaired by removing all loose and defective material and replacing with a patching mixture of slow ouring asphalt and mineral aggregate.
- Fill small cracks (except hairline cracks) with a lighter grade of rapid and medium-curing liquid asphalt (heat, if necessary, to a pouring viscosity).
- Fill larger cracks with same material combined with line sand or other fine aggregate.
- d. Oil spills (from autos) must be torched to a level of solid asphalt to remove all volatile oil, followed by removal of all loose aggregate then sealed with shellac or a sealer manufactured for this purpose before sealed acting.
- Immediately prior to application of asphalt sealcoat, all loose and foreign material shall be removed by light sweeping, and if dusty, the surface shall be dampened with water.

2. Materials:

The sealcoat material shall be homogenous and show no separation or coagulation of components that cannot be overcome by noderate stirring. It shall be capable of application and complete coverage, by squeegee, brush, or by approved mechanical methods, to the surface of bituminous pavements at a spreading rate of 1.5 to 2.5 gallons per 100 square feet in two coats. The emulsion shall be prepared from straight run high temperature coke-oven tar conforming to requirements of R-T-143. Petroleum tar and oil and water gas tars shall not be used even though they comply with R-T-143. #52 Silica Sand should be added at the rate of 4-6 pounds per gallon.

3. Chemical and Physical Requirements:

The material shall conform to the following requirements prior to fortification with antifreeze"

	MAA.	1911191
Water, percent	53%	-
Nonvolatiles, percent	-	47%
Ash of nonvolatiles, percent	40%	30%
Solubility of nonyolatiles in CS2	-	20%
Specific gravity 2S C/25 C		1.20%

Asphalt Sealcoat Specifications

Drying Time:

The coating shall exhibit "final set" in not more than eight hours.

5. Adhesion and Resistance to Kerosene:

The cured coating shall exhibit no penetration or loss of adhesion. Kerosene shall be defined as material complying with VV-K-211.

6. Resistance to Heat:

The cured coating shall show no sign of blistering, sagging or slipping when heated at 80° C, for two hours.

Adhesion and Resistance to Water:

The cured coating shall exhibit no blistering, loss of adhesion, or tendency to re-emulsify,

Flexibility:

The coating shall show no flaking, cracking, or loss of adhesion to the metal.

Resistance to Impact:

The coating shall exhibit no shipping, flaking, cracking, or loss of adhesion extending more than 1/4 inch beyond the periphery of the area of impact. (NOTE: This requirement may be waived at the discretion of the purchaser or engineer in charge of the project, provided the supplier can furnish a certification of satisfactory field performance record of not less than three years.)

10. Resistance to Volatilization shall be determined in accordance with ASTM D1010, except that the residue from the procedure outlined in section 6 shall be heated in an oven at 270 degrees F. for 30 minutes.

11. Wet Film Continuity:

Emulsion, when wet, shall be uniformly smooth, nongranular consistency free from coarse particles.

Resistance to Freezing:

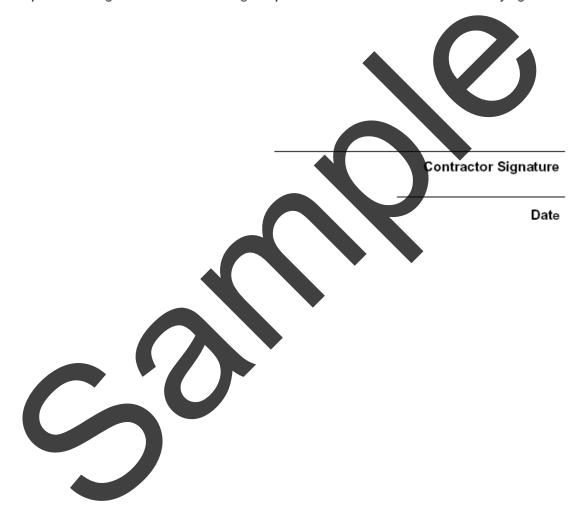
When specified, emulsion shall be fortified with antifreeze and be capable of exposure for 24 hours at 0 degrees F. (-17 C.) and when warmed to 77 degrees F. (25 C.) shall return to a homogeneous consistency with stirring.

Asphalt Sealcoat Specifications

13. Application:

Material should be applied with a machine designed for this purpose or with a squeegee at the rate of 0.1 to 0.2 gallons per square yard, depending on the texture and porosity of old pavement. Second coat <u>only</u> may be sprayed.

14. Complete coverage without bleed-through or pock marks must be obtained after drying.



Parking Area Striping Specifications

Parking Area Striping Specifications				
Scope of Work				
Stripe all visible parking areas at	Apartments.			
<u>Specifications</u>				
Preparation of existing surface:				
Areas to be striped must be thoroughly clea removed by scrubbing or sealing affected areas	aned. Heavy dirt, grease, and debris must be			
Application of Striping Materials:				
must utilize a curtain of air to clean the surf	ine capable of this function. Striping machine face as it is being painted. Machine must provide against the edges of the spray pattern to cause			
Product Specifications:				
Product should be commercial traffic zone is sure to follow all local codes. Paint must be	paint. Color is the choice of management. Making applied per manufacturers specifications.			
4. Operational Specifications:				
NOTE: The restriping of "No Parking Areas" and "Hon site staff. Color and size are to follow lo	Handicapped Parking Areas" will be indicated by			
	Contractor Signature			
	Date			

Sample Service Request Form

Property Name:
Date:
Time:
Taken By:
Apartment Number:
Resident Name:
Resident Phone Number:
Entry Permission:
Specific Problem/Work Requested:
Assigned to:
Date:
Recommendations/Comments:
Action Taken: Completed Temporary Repairs Parts Replaced Parts on Order Time In: Time out:
Completed by:
Resident Charge/Subcontractor Cost:
Resident called back
Comments:

Sample Service Request Summary

Property:		
Date:		

Employee	Title	# Work Orders Completed	Total Time	Comments

Work Requests

SERVICE REQUESTS	MAKE-READY
Total received for week.	Total painted.
Total completed.	Total maintenance
·	completed.
Pending from previous	Total cleaned.
week.	
Pending from current	Total completed.
week.	
Holding for parts.	
Total all work requests.	
Emergencies Handled	Total Vacancies

Service Request Follow-up

Apt #	Resident	# of SRs	Follow-up Date	Response/Result

Sample Certificate of Insurance

							PS AT ARROW	
E;	RTIFICATE OF INS					ISSUE DATE	/5/85	
PRODUCER XYZ Agency 4589 Flower Blvd.		THIS CER RIGHTS U OR ALTER	THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW.					
С	leveland, Ohio 44213		COMP	ANIES AFFOR	DING CO	VERAGE		
		COMPANY	A United	States Fidelity & Gua	aranty Co.			
INSURED Asphalt Paving Co. 1256 Norman Drive		COMPANY	В		. * * * * * * * * * * * * * * * * * * *			
Ċ	leveland, Ohio 44135	COMPANY	С					
		COMPANY	D					
		COMPANY	E					
cc	VERAGES							
TIN	IN EARGES HIS IS TO CERTIFY THAT POLICIES OF INSURANCE IDICATED. NOTWITHSTANDING ANY REQUIREMENT. RETIFICATE MAY BE ISSUED OR MAY PERTAIN, THE XCLUSIONS, AND CONDITIONS OF SUCH POLICIES.	LISTED BELOW TERM OR COND INSURANCE AF	HAVE BEEN ISSU ITION OF ANY COI FORDED BY THE I	ED TO THE INSURE NTRACT OR OTHER POLICIES DESCRIB				
e FR	TYPE OF INSURANCE	POLICY NUMBER	POLICY EFFECTIVE DATE (MM/DD/YY)	POLICY EXPIRATION DATE (MM/DD/YY)	- VA	EACH OCCURENCE	AGGREGAT	
	GENERAL LIABILITY	1CC061293750	11/30/84	11/30/85	BODILY	S300	s	
	COMPREHENSIVE FORM PREMISES/OPERATIONS UNDERGROUND EVELOSION & COLLAPSE HAZARD	100001200100			PROPERT DAMAGE	X \$100	\$100	
EXPLOSION & COLLAPSE HAZARD PRODUCTS/COMPLETED OPERATIONS CONTRACTUAL DESCRIPTION ON TRACTORS				BI & PD COMBINE	s	s		
	INDEPENDENT CONTRACTORS BROAD FORM PROPERTY DAMAGE PERSONAL INJURY				PERSONA	LINJURY	s	
	AUTOMOBILE LIABILITY ANY AUTO ALL OWNED AUTOS (PRIV. PASS.)				BODILY INJURY (PER PERSON)	\$ 250		
•	ALL OWNED AUTOS (PRIV. PASS.) ALL OWNED AUTOS (OTHER THAN PRIV. PASS.) HIRED AUTOS NON-OWNED AUTOS GARAGE LIABILITY) 1CC06123750	11/30/84	11/30/85	BODILY INJURY (PER ACCIDENT	\$ 500		
					PROPERT DAMAGE	Y \$ 100]	
	•				BI & PD COMBINE	s D		
	EXCESS LIABILITY UMBRELLA FORM OTHER THAN UMBRELLA FORM	CEP059507569	11/30/84	11/30/85	BI & PD COMBINE	\$1,000 D	s	
	WORKERS' COMPENSATION	18 54466 84 4	11/30/84	11/30/85	STATUTO			
	AND EMPLOYERS' LIABILITY	18 34486 84 4	1750754	11,00,00	I -	\$ 100 (EACH ACC		
					-	S 500 (DISEASE-F S 100 (DISEASE-F		
	OTHER				 	3 TOO (DISEASE-I	DAGIT ENIT EG	
	·		<u> </u>	<u> </u>				
- /	CRIPTION OF OPERATIONS/LOCATIONS/VEHICLES/SE	ECIAL ITEMS						
4	Asphalt paving and repairs	-	ANCELLATIO	ON .				
Ca 18		-	SHOULD ANY OF EXPIRATION DATE TO DAYS WRITTER BUT FAILURE TO	THE ABOVE DESCRIPTION OF THE IS NOTICE TO THE IS NAIL SUCH NOTICE ON THE COMPANY, IN THE COMPA	SUING COM CERTIFICATI SHALL IMPO	IPANY WILL END E HOLDER NAME OSE NO OBLIGATI	EAVOR TO M D TO THE LE ON OR LIABIL	

Sample Property Inventory Form

Property:

Property Inventory

By: _____ Date: ____

	T			,
Location	Description	Make	Model	Serial #
				

Location: M - Maintenance Shop

O - Office

S - Storage

C - Clubhouse

Sample Preventive Maintenance Schedule

Property: Month: March				
Description	Completed By Date	Check	Regional Check	Comments
Check all circulating pumps & motors for leaks & corrosion. Oil as specified by manufacturer.				· · · · · · · · · · · · · · · · · · ·
Clean storage, equipment & maintenance rooms. Update inventory.				
Replace burned out exterior lights, check photocells.				
Use enzyme sewer p.m. on problem bldgs. Replace missing sewer caps.				
Inspect gutters, downspouts, foundations, exterior walls, balconies & washouts—attach list of needed repairs.		4		
90-day maintenance inspection and filter change. Apts thru completed. (Must complete one third of property.)				
Complete repair of sprinkler systems. Set timers to water every other day. Check weekly for broken heads, etc.				
Clean automatic chlorinator & check out all pool equipment.				
Lawns & shrubs are to be fertilized & watered thoroughly. Flower beds to be cleaned & turned.		>		

Some items on schedule may not apply to your property. If not, put N/A under the date completed column, finis schedule must be completed and returned to the Regional Office by the first of the following month of the schedule.

Preventive Maintenance Landscaping Monthly Report

(month/year)

Group 1	Work to be Completed	Completed
Chain Saw	Inspect/replace filter	
Street Blower	InspectChange oil and filter	
Storm Drains	Check and clean out	
36" Toro Lawnmower	Inspect/replace filter	
Group 2	Work to be Completed	Completed
Back Pac	Inspect	
Trailer	Inspect	
Site Inspection	• Use chart	<u> </u>
Vacuum/Blowing	Parking lots	
52" Toro Lawnmower	Inspect/replace filter	
Supervisor/Foreman	Work to be Completed	Completed
Shrub Care	Prune (shape and corrective) Spray for insects	
Turf Weed Control	Weed control for crabgrass and broadleaf	
Turf Insect Control	Order	
Mow/Weedeat/Edge	Entire site	
Weed Control	Spray mulch beds with hand sprayer	

Preventive Maintenance Maintenance Monthly Report

(month/year)

Group 1	Work to be Completed	Completed
White Sand Boiler	 Inspect weekly/use chart 	
Pickup	Inspect & clean Check all fluids, belts, and tires Change oil, filter, and grease	
Tennis/Volleyball Courts	 Inspect surface, nets, and fence 	
Community Building	Inspect and service per checklist	
Buildings	Inspect exterior	
Group 2	Work to be Completed	Completed
Brownleaf Boilers	Inspect weekly/use chart	
Tenant Storage	Inspect Check smoke detectors	
Paint Compressor	Check chart in paint trailer	
Buildings	Inspect exterior	
Paint Trailer	• Inspect	
Swimming Pool	Inspect pump room, guard room, fence, and furniture	
Group 3	Work to be Completed	Completed
Black Rock Boilers	Inspect weekly/use chart	
Buildings	Inspect exterior	
Maint Cart #1	Inspect tires, lights, batteries, and cover	
Hand & Power Tools	Inspect	
Group 4	Work to be Completed	Completed
Green Moss Boilers	 Inspect weekly/use chart 	
Garage	• Inspect	
Fire Extinguishers	 Inspect at Community Building, vehicles, and storage rooms 	
Maint Cart #2	• Inspect tires, lights, batteries, and cover	
Buildings	Inspect exterior	

Group 5	Work to be Completed	Completed
Mill Shop	• Inspect	
Building #39	• Inspect	
Maint Cart #3	 Inspect tires, lights, batteries, and cover 	4
Supervisor/Projects	Work to be Completed	Completed
Staff Meetings	 Pros and Cons of Operations 	
Outside lights	 Inspect by Security 	
Fire Sprinkler System	 Inspect Community Building 	
Safety Meeting	Material Data Safety SheetsReview safety equipment and procedure	s
V.H.D.A.	Inspection	
Exercise Room	Oil and check all exercise equipment	



NAAEI thanks you for taking the Certified Apartment Manager (CAM) program.

Following is a list of items that you may find on the NAA Web site that may not be included in the program text that is to be used for your reference while taking the courses in this program:

- Supplement/Resource Materials
- CAM Skill Checks and Answer Key
- Additional Course Handouts

These files may be downloaded from the NAA Web site by visiting:

www.naahq.org/education/CandidatesOnly

