



Environmental Health & Safety

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The Ohio State University
Elevated Work Safety Program

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1.0 Introduction

- 1.1 Elevated work poses a safety hazard if the equipment is not utilized and maintained properly. This program provides information for users of elevated work equipment to safely perform their job duties.
- 1.2 Elevated work involves any work conducted above the substrate. Equipment used to vertically elevate a worker above the substrate includes, but is not limited to, aerial devices (i.e. scissor lifts, aerial lifts, boom buckets), scaffolding and ladders.
- 1.3 Purpose: The elevated work program is developed and maintained to provide safety related information to users of these devices and minimize injuries as a result of improper use.
- 1.4 Scope: This program covers all Ohio State University (OSU) departmental personnel including staff and contractors utilizing equipment to perform elevated work on OSU property.

2.0 Responsibilities

- 2.1 Environmental Health & Safety: The Office of Environmental Health & Safety (EH&S) is responsible for program development, consultation and plan update assistance. EH&S is available to provide training and program implementation assistance to all departments within OSU.
- 2.2 OSU Departments: Responsibilities of the department includes elevated work program implementation; maintenance of equipment; training of personnel assigned to conduct elevated work; and inspections and safe use of equipment. In addition, all departments will assign a competent person for this program area.
- 2.3 Competent Person: The competent person is an employee of a department who is experienced, trained and competent with elevated work equipment through appropriate training and hands-on experience. The competent person is responsible for implementation and annual review of this plan to include updates and revisions as necessary and to ensure department employees have received the proper elevated work training prior to use of equipment.
- 2.4 Supervisor: Supervisors of employees required to utilize elevated work equipment must be knowledgeable in this program and be capable of recognizing hazards associated with elevated work equipment and share this information with employees in their department. Supervisors shall assist the competent person in ensuring employees have received the proper elevated work training prior to use of equipment.

2.5 Staff: Staff with responsibilities involving elevated work must be appropriately trained in the contents of this program, knowledgeable of the specific equipment they work with and able to recognize hazards and equipment deficiencies related to elevated work. Staff will not use elevated work equipment when it is not safe to do so and will report all unsafe conditions to their supervisors.

3.0 Definitions

Aerial lift: any device (vehicle-mounted; telescoping or articulating) used to position personnel.

Anchor point/Anchorage: secure point of attachment for lifelines, lanyards or deceleration devices.

ANSI: American National Standards Institute.

Body harness: straps which may be secured about the employee in a manner that will distribute the fall arrest forces over at least the thighs, pelvis, waist, chest and shoulders with means for attaching it to other components of a personal fall arrest system.

Certified operator: a person who is trained to operate aerial lifts and utilize elevated work platforms.

Competent person: a person who is capable of identifying existing and predictable hazards in the surroundings or working conditions which are hazardous to employees and has the authorization to take prompt corrective measures to correct them.

Elevated work platform: surfaces on which operators work as part of an aerial device.

Fall arrest system: a system used to arrest an employee in a fall from a working level. It consists of an anchorage, connectors, a body belt or body harness and may include a lanyard, deceleration device, lifeline or suitable combinations of these. As of January 1, 1998, the use of a body belt for fall arrest is prohibited.

Fall restraint system: fall protection system, which prevents an employee from approaching a fall hazard through the use of a lanyard and body harness.

Ladder: Ladders are structures made of fiberglass, wood, metal, etc., commonly consisting of two sidepieces between which a series of bars or rungs are set at suitable distances, forming a means of climbing up or down to access elevated work surfaces.

Lanyard: a flexible line of rope, wire rope or strap which generally has a connector at each end for connecting the body belt or body harness to a deceleration device, lifeline or anchorage.

Load: for all ladders (fold out, leaning and fixed), the load to be placed on the ladder equals the person's body weight plus materials and tools being used; scaffolds must be able to support at least four times the maximum intended load.

Mobile lift: a combination of an aerial device, its vehicle and related equipment.

Observation tower: engineered stationary elevated work platforms to be used for observing surrounding events.

OSHA: Occupational Safety and Health Administration.

Scaffolding: system composed of poles and planks to provide elevated work platforms.

4.0 Mobile Lifts

Mobile lifts include a variety of equipment including, but not limited to, scissor lifts, articulating boom lifts, truck mounted lifts, etc. Mobile lifts may be powered or manual and serve to elevate the worker to the required area while providing specific safety features to minimize/eliminate the risk of injury.

This section addresses the general use, inspection, maintenance and personal protective equipment associated with the use of aerial lifts. It is the responsibility of the operator, their supervisor and the department to adhere to the manufacturer's specific instructions and safety precautions at all times during the use of aerial lifts.

4.1 Aerial lifts must meet all applicable design criteria including, but not limited to the following:

- OSHA 29 CFR 1910.67-Powered platforms, Manlifts and vehicle-mounted work platforms
- ANSI A92.5-2006: Boom supported elevating work platforms
- ANSI A92.6-2006: Self-propelled elevating work platforms
- ANSI A92.2-2009: Vehicle-mounted elevating and rotating aerial devices
- ANSI A92.3-2006: Manual propelled elevating aerial platforms

4.2 Pre-use inspection: Each aerial lift will be inspected prior to use by the certified operator. The purpose of the pre-use inspection is to ensure there are no deficiencies related to the lift equipment and no additional hazards associated with the task being completed using the lift. Additional hazards include adverse weather, electrical, vehicular and pedestrian traffic control and surface conditions and are covered in detail in Section 8 of this plan.

4.2.1 The pre-use inspection will identify conditions, which may render the use of the equipment unsafe. If any condition is noted during the pre-use inspection, which may render the equipment unsafe, the equipment will be tagged “out of service”, the operator will notify their supervisor of the deficiency and the equipment will not be utilized until deficiencies are corrected.

4.2.2 Pre-use inspections will consist of visual and operational checks of all components of the aerial lift system and associated work conditions. Manufacturer recommendations should be followed to address specific items to be included during the pre-use inspections. It is the responsibility of the department’s staff to develop comprehensive inspections to be used for each type of aerial lift. Appendix A provides an example of an aerial lift pre-use inspection checklist. At a minimum, the inspection process should address the following areas:

4.2.2.1 Visual checks:

- Cracked welds
- Bent or broken structural components
- Hydraulic and fuel lines
- Controls and cables
- Wiring
- Tire condition
- Fuel
- Platform condition
- Personal protective equipment
- Guardrail systems

4.2.2.2 Operational checks: platform and ground controls should be operated while in a lowered position to ensure they perform their intended functions.

4.2.2.3 Work condition checks: this portion of the inspection deals with the conditions in which the lift will be operated and the surrounding environment. Specific details regarding hazards associated with aerial lift use are provided in Section 8 of this plan and includes:

- Uneven surfaces
- Ditches, drop-offs, and holes in the driving surface
- Debris
- Overhead obstructions, including electrical lines

- Safe clearance
- Adverse weather
- Vehicular and pedestrian traffic control

4.2.3 Completed inspection checklists will be maintained by the supervisor and kept on file in the department office.

4.3 General requirements for use. It is the responsibility of the operator to review the manufacturer specifications for the aerial lift being used and be familiar with the safe operation of the equipment. The following general requirements for use of an aerial lift should be followed at all times:

4.3.1 Operators will not wear loose clothing or accessories, which may become caught in moving parts. Long hair must be tied back and protected against being caught in moving parts.

4.3.2 Guardrails must be installed and access gates or openings must be closed prior to raising the platform.

4.3.3 The manufacturer's load capacity will not be exceeded.

4.3.4 The operator(s) will maintain footing on the lift floor during operation. The use of railings, planks, ladders or any other devices on the platform for achieving additional height is prohibited.

4.3.5 Appropriate fall protection (lanyard and body harness) will be made available to the operator and used by aerial lift operators when required/recommended as per the manufacturer's specifications. Refer to the OSU Fall Protection Program for details on fall protection PPE requirements and use.

4.3.5.1 Anchor points designed for use with a fall protection system will be used as a tie-off point. Use of railings or points outside the lift cage as an anchor point is prohibited.

4.3.6 The operator will not exit the work platform while elevated unless the elevated work area is inaccessible by other means; exiting is being used as an anti-fatigue measure; it is a safer method of reaching an elevated work area; and the operation is approved by the supervisor.

4.3.6.1 If exiting the lift platform is approved, appropriate fall protection must be provided.

4.3.6.2 Exit from an elevated platform will occur only through a gate.

4.3.6.3 Fall protection must be transferred from the aerial lift to the elevated work area prior to exiting the lift platform.

4.3.7 Aerial lifts should be moved in the lowered position. Only aerial lifts equipped with manufacturer installed platform controls for horizontal movement may be moved while in the elevated position.

4.3.7.1 If the lift is to be moved in an elevated position, the operator will ensure a clear path of travel and safe clearances from ground and overhead obstacles.

4.3.7.2 A ground level spotter should be utilized during elevated movement operations.

4.3.8 If the aerial lift is equipped with outriggers or stabilizers, they will be used as per the manufacturer's specifications.

4.3.9 Surface slope should be taken into consideration when using an aerial lift and operation should only occur on smooth level surfaces or within the slope limitations provided by the manufacturer specifications.

4.3.10 Vehicle mounted aerial lifts will have the brakes set and wheels chocked prior to elevating the platform.

4.3.11 Altering, modifying or disabling safety devices on the aerial lift are prohibited.

4.3.12 At no time should the work platform be positioned against another object to steady the platform.

4.3.13 Two persons will be present during aerial lift operation.

4.3.14 Prior to lowering the work platform, the operator will ensure appropriate clearance below the work area.

4.3.15 Horseplay and/or stunt driving is prohibited.

4.4 Aerial lift maintenance. Aerial lifts utilized from an equipment rental company should be appropriately maintained by the equipment owner. The department will ensure any equipment rented is appropriately maintained. Aerial lifts owned by the department will be maintained as required by the equipment manufacturer by a competent individual assigned by the department.

- 4.4.1 OSU owned equipment will be certified annually by a competent individual as per the manufacturer's specifications.
- 4.4.2 Deficiencies noted during pre-inspection or during operation will be addressed by the competent person prior to placing the equipment back in service.

4.5 Personal protective equipment.

- 4.5.1 Fall protection will be used when operating aerial lifts.
 - 4.5.1.1 When an anchor point is provided on the lift by the equipment manufacturer, an appropriate fall arrest or fall restraint system must be utilized by the operator. The operator will be trained in the safe use of a fall protection system prior to operating the lift.
 - 4.5.1.2 In some cases, the guardrail system installed on the lift is suitable fall protection equipment. If the lift is equipped with an anchor point in addition to a guardrail system, fall arrest/restraint devices including lanyards and body harness/belt will be used by the operator.
 - 4.5.1.2.1 Tying a lanyard off to an adjacent pole, structure, or equipment while operating the lift is prohibited.
 - 4.5.1.3 It is the responsibility of the supervisor to develop rescue operations for situations when a fall occurs. Refer to the OSU Fall Protection Program for development of fall protection rescue procedures.
- 4.5.2 Other types of personal protective equipment including head, eye and hand protection will be utilized based on the work being performed by the operator.

5.0 Ladders

Ladders are structures made of fiberglass, wood, metal, etc., commonly consisting of two sidepieces between which a series of bars or rungs are set at suitable distances, forming a means of climbing up or down to access elevated work surfaces. Typically, ladders are self-supporting (foldout), non self-supporting (leaning) and mounted (fixed).

- 5.1 All ladders used by department personnel or contractors, must meet the requirements set forth by OSHA 29 CFR 1926.1053-Ladders.

5.2 General requirements. The weight of the person and the equipment/materials being used will not exceed the manufactures load rating. The following outlines ladder load ratings:

Type	Load Rating	Working Load (pounds)
IAA	Industrial – Special Heavy Duty	375
IA	Industrial – Extra Heavy Duty	300
I	Industrial – Heavy Duty	250
II	Commercial – Medium Duty	225
III	Household – Light Duty	200

5.3 Specific types of ladders.

5.3.1 Step Ladders

5.3.1.1 Do not use the top or top step of a step ladder as a step

5.3.1.2 Do not use the cross bracing for climbing unless specifically designed with steps on the front and rear for climbing

5.3.1.3 Metal spread bars or locking devices must be provided on step ladders to hold the front and back sections in an open position when the ladder is being used

5.3.1.4 Do not use a step ladder without the metal spread bar or locking device in a locked position

5.3.2 Portable ladders

5.3.2.1 The minimum clear distance between side rails for all portable ladders must be 11.5 inches. In addition, the rungs and steps of portable metal ladders must be corrugated, knurled, dimpled, coated with skid-resistant material or treated to minimize slipping.

5.3.2.2 When portable ladders are used for access to an upper landing surface, the side rails must extend at least three feet above the upper landing surface. When such an extension is not possible, the ladder

must be secured and a grasping device, such as a grab rail, must be provided to assist workers in mounting and dismounting the ladder.

5.3.3 Fixed ladders

5.3.3.1 If the total length of the climb on a fixed ladder equals or exceeds 24 feet, it must be equipped with ladder safety devices (i.e. fall protection). An alternative to the aforementioned ladder safety device would include a self-retracting lifeline and rest platforms set at intervals not to exceed 150 feet. Another alternative would include a cage or well and multiple ladder sections with each ladder section not to exceed 50 feet. However, these ladder sections must be offset from adjacent sections and must have landing platforms at maximum intervals of 50 feet.

5.3.3.2 Individual rungs on fixed ladders must extend 42 inches above the access level or landing platform either by a continuation of the rung spacings as horizontal grab bars or by providing vertical grab bars that have the same spacing as the horizontal grab bars.

5.3.3.3 Step-across distance between the center of the steps or rungs of fixed ladders and the nearest edge of a landing area must be no less than seven inches and no more than 12 inches. A landing platform must be provided if the step-across distance exceeds 12 inches.

5.3.3.4 Fixed ladders must be used at a pitch no greater than 90 degrees from the horizontal, measured from the back side of the ladder.

5.4 Ladder Safety. Whenever ladders are used, the following safety guidelines will be followed for all types of ladders:

- Always read and follow all manufactures labels/markings on the ladder
- Always look for overhead power lines before moving or setting up a ladder
- Avoid using a metal ladder near power lines or exposed energized electrical equipment
- Always inspect a ladder prior to use (see Pre-Use Ladder Checklist in Appendix B)
- A damaged ladder must be tagged as “Do Not Use” and taken out of service until repaired or discarded

- Always maintain a three point contact with the ladder (two hands and one foot or two feet and one hand)
- Keep your body near the middle of the step and always face the ladder while climbing
- Ladders must be free of any slippery material on the rungs, steps or feet
- Do not use a step ladder as a single ladder or in a partially closed position
- Use a ladder only on a stable and level surface, unless it has been secured (top or bottom) to prevent displacement
- Do not place a ladder on boxes, barrels or other unstable bases to obtain additional height
- Do not move or shift a ladder while a person or equipment is on the ladder
- A leaning ladder used to access an elevated surface must extend at least three feet above the point of support
- Do not stand on the three top rungs of a leaning ladder
- Always set the base of a leaning ladder one-foot out horizontally from the support for every four feet the ladder extends vertically
- A ladder placed in any location where it can be displaced by other work activities must be secured to prevent displacement or a barricade must be erected to keep traffic away from the ladder
- Be sure that all locks on a non self-supporting ladder are properly engaged
- Ladders should never be painted (with the exception of metal ladders) due to potential of masking damage (i.e. dry rot, cracks or splinters)

5.5 Training

- 5.5.1 It is the responsibility of supervisors (or a competent person) to train all personnel using ladders to recognize the hazards associated with the type of ladder being used and be instructed on how to minimize hazards.

6.0 Scaffolding

Scaffolding is a temporary structure for holding workers and materials during the erection, repair or decoration of a building. Scaffolding will be erected by a competent person who is properly trained. All scaffolding exceeding 125 feet in height must be designed by a registered professional engineer. All scaffolding must meet the construction requirements as set forth by OSHA 29 CFR 1926 Subpart L – Scaffolds.

- 6.1 Fall protection or fall arrest. All employees working 10 feet above the ground or above the next lower level will be protected from falls by using either guardrails or a fall arrest system.
- 6.1.1 Guardrail height. The height of the top rail for scaffolds must be between 36 inches and 45 inches.
 - 6.1.2 Crossbracing. When the cross point of the crossbracing is going to be used as a top rail, it must be between 38 inches and 48 inches above the working surface.
 - 6.1.3 Midrails. Midrails must be installed halfway between the top rail and the working surface. When the cross point of the crossbracing is going to be used as a midrail, it must be between 20 inches and 30 inches above the working surface.
 - 6.1.4 Guardrails are not required when the front end of the working surface is less than 14 inches from the face of the work.
- 6.2 Footings. Support scaffold footings will be level and capable of supporting the loaded scaffold without settling or displacement. The legs, poles, frames and uprights will be placed on the base plates, mud sills or other adequate firm foundations.
- 6.3 Platforms (working surfaces). Supported scaffold working surfaces will be fully planked or decked.
- 6.3.1 The space between the working surface and the uprights must not exceed one inch in width.
 - 6.3.2 Scaffolding planking must be able to support its own weight and at least four times the intended load without failure.
 - 6.3.3 Solid sawn-wood, fabricated planks and fabricated work surfaces may be used as scaffolding planks following the recommendations by the manufacturer or a lumber grading association or inspection agency.
 - 6.3.4 The planking material for the working surface must not deflect more than $1/60^{\text{th}}$ of the span when loaded.
 - 6.3.5 All scaffolding work surfaces and walkways must be at least 18 inches wide. When the area is less than 18 inches wide, guardrails and/or fall arrest systems must be used.

6.4 Guying ties and braces. Supported scaffolding with a height to base ratio of more than 4:1 will be restrained from tipping by guying, tying, bracing or some equivalent means.

6.5 Inspections. Before each work shift and after any occurrence that could affect the structural integrity of a scaffold, a competent person must inspect the scaffold and scaffold components for visible defects. Any defects will be corrected prior to use.

6.6 Erecting and dismantling. When erecting or dismantling supported scaffolds, a competent person must determine the feasibility of providing a safe means of access and fall protection for these operations.

6.7 Falling object protection. To protect employees from falling objects, toeboards must be installed on the working surfaces. Toeboards must be at least four inches wide.

6.7.1 Other acceptable falling object protection methods include screens, debris nets, catch platforms, canopy structures or the use of barricades.

6.8 Inspections and maintenance.

6.8.1 Prior to use, the operator/user will perform a visual inspection of the scaffolding system to ensure no deficiencies are present.

6.8.2 Scaffolding will be certified upon erection by a competent person. Scaffolds in place for more than one year require an annual certification by a competent person.

7.0 Permanent Observation Towers

Permanent observation towers are structures that command a wide view of its surroundings. It is the responsibility of the department that owns the tower to ensure they are engineered, designed, maintained, constructed and inspected for their intended purpose.

7.1 General requirements.

7.1.1 Only authorized personnel are permitted to utilize permanent observation towers.

7.1.2 Towers will be equipped with suitable fall protection including handrails on stairways and guardrails on the tower platform.

7.1.3 Towers should be clearly marked with information specific to their use, including occupancy limitation, weather limitation and other limitations of use.

- 7.1.4 Access to observations towers will be restricted to unauthorized personnel while in use and while not in use.
- 7.1.5 Tower users will maintain secure footing on the tower floor. Use of railings to increase height is prohibited.

7.2 Inspections and maintenance.

- 7.2.1 Observation towers will be certified initially by a competent individual.
- 7.2.2 At a minimum, observations towers will be certified annually by a competent individual.
- 7.2.3 Tower users should perform a visual inspection prior to and during use to detect any deficiencies, which may render the tower unsafe. Unsafe conditions noted during inspection will be reported to the supervisor and tower access must be restricted until the issue is resolved.
 - 7.2.3.1 Any deficiencies noted must be addressed and rectified prior to allowing use of the tower.
 - 7.2.3.2 Repairs to observation towers may only be completed by authorized individuals.
 - 7.2.3.3 The department supervisor will maintain all certification and repair records.

8.0 Hazards

Elevated work being conducted must take into consideration additional hazards, which may affect the safety of the individual performing the work. The following hazards will be addressed prior to and during use of elevated work equipment. It is the policy of OSU to minimize the risk of injury to employees and contractors utilizing these systems. Their use is not permitted if the following hazards are not appropriately addressed or controlled.

- 8.1 Inclement weather. Elevated work equipment for use outdoors must address inclement weather as a prerequisite of operating the elevated work equipment. It is the department's responsibility to maintain "on-call" individual(s) for all activities when outdoor use of elevated work equipment is conducted. It is the responsibility of the on-call individual to monitor the weather and determine if changes occur, which may create

unsafe work conditions and to alert aerial lift/elevated work platform users when these conditions arise.

8.1.1 Wind: Aerial lifts, scaffolds and observations towers must have a posted wind speed limitation. The equipment manufacturer is responsible for supplying this information to the department. If wind speeds exceed 25 miles per hour, use of an aerial lift or elevated work platform is not recommended as per the department's policy. Refer to the manufacturer's specifications or design criteria for specific wind limitations.

8.1.1.1 All operators and users of aerial lift/elevated work platforms will be informed of these limitations and have suitable means for detecting elevated wind speeds prior to performing elevated work through approved wind gauges, up-to-date weather reports or other approved methods.

8.1.2 Precipitation: Rain, snow, hail, sleet or fog, which may adversely affect the safe use of aerial lifts/elevated work platforms, will be appropriately addressed prior to elevated work being performed. If these conditions cannot be appropriately addressed, work will not be performed until weather conditions improve.

8.1.3 It is the responsibility of the aerial lift operator or elevated work platform user and their supervisor to determine when inclement weather will render elevated work platforms unsafe.

8.1.4 Suitable means of communication between the aerial lift/elevated work platform user and their supervisor(s) must be maintained and available for use at all times to convey pertinent information.

8.2 Electrical hazards.

8.2.1 Only personnel certified to work on electrical lines will be permitted to approach electrical lines during aerial work platform operations.

8.2.2 Elevated work equipment will not come within 10 feet of overhead electrical lines at anytime, unless approved to work on overhead electrical lines.

8.2.3 Electrical lines carrying voltages greater than 50 kV will be addressed by a certified individual prior to elevated work being performed.

8.2.4 It is the responsibility of the employee to ensure overhead electrical lines are addressed prior to elevated equipment use, and avoided during use.

8.3 Vehicular and pedestrian traffic. At all times during the use of elevated work equipment, the employee will ensure vehicular and pedestrian traffic does not create additional hazards.

8.3.1 During the use of mobile lifts, the operator will ensure the path of travel is not made unsafe due to excess vehicular or pedestrian traffic.

8.3.2 Stationary elevated work platforms will be constructed and protected to ensure vehicular and pedestrian traffic is restricted.

9.0 Training

9.1 All employees and users of elevated work equipment will receive training prior to any use of this equipment.

9.1.1 Aerial/mobile lift training consists of classroom instruction, hands-on training and practical evaluation. Training will be provided by a competent trainer, the equipment manufacturer or training consultant.

9.1.1.1 Training should address the following areas of safe use:

- Review of equipment manuals
- Pre-use inspections
- Operator responsibilities
- Stability
- Warning signs
- Safe use
- Fall protection
- Equipment limitations (wind, occupancy, surface slope, etc.)

9.1.1.2 Hands-on training should provide the trainee with the experience to allow them to safely operate the lift.

9.1.1.3 Practical evaluations will be provided to the trainee as a certification step in the training process

9.1.1.4 Upon successful completion of training, operators will be certified to operate aerial lifts.

9.1.1.5 Training records must be maintained by the department supervisor.

9.1.1.6 Operator recertification will be completed every three years or when one of the following occurs:

- The operator is observed using the lift in an unsafe manner
- The operator is involved in an accident or near miss
- The equipment changes
- Workplace conditions change resulting in unsafe work conditions.

9.1.2 Stationary elevated work platform training will be provided to all personnel utilizing/maintaining the platforms. Training should be conducted by a competent individual and address the following topics.

- Safe equipment use
- Equipment limitations (wind, precipitation, occupancy, etc.)
- Restricting access when in use and not in use

10.0 Recordkeeping

10.1 It is the responsibility of the supervisor and department to maintain records for all aerial lifts, elevated work platforms and employee training records. Records should include:

- Inventory of all aerial lifts, elevated work platforms, scaffolds and ladders.
- Manufacturer specifications/engineering design for all elevated work systems
- Employee training, to include:
 - Employee/operator name
 - Dates of training
 - Trainer
 - Aerial lifts/elevated work systems covered in training
 - Testing results
- Department specific Standard Operating Procedures for elevated work systems
- Equipment inspection records
 - Pre-use inspection records
 - Annual inspection/certification records
- Equipment maintenance records

11.0 Contractors

11.1 It is the department's supervisor responsibility to ensure all contractors adhere to the policies outlined in this program when working on/with elevated work equipment.

- 11.2 Contractors utilizing their own equipment must have their own safety policy and be capable of providing training records for all employees utilizing the equipment.
- 11.3 At no time will an employee or other non-department staff member be authorized to utilize elevated work equipment unless formal training is completed and documented.

Appendix A

Sample aerial lift pre-use inspection checklist

Sample aerial lift pre-use inspection checklist

A pre-use inspection of each aerial lift will be performed prior to each use by an authorized and certified lift user. Documentation of the inspection will be maintained by the department (supervisor) and copies of previous inspections must be made available to all operators.

Any items noted as deficient must result in the lift being taken out of service until proper maintenance has been performed to provide a lift in proper working order. A sign clearly indicating the lift is unsafe will be affixed to the lift anytime it is deemed unsafe.

This checklist serves as an example of items to be inspected on an aerial lift. Refer to the manufacturer's specifications for additional inspection points.

Aerial lift owner:		Make of lift:	
Lift serial #:		Model of lift:	
Inspector name:		Date of inspection:	

Inspection item	Pass	Fail	N/A	Comments
Operating controls				
Emergency controls				
Safety devices				
Personal protective devices				
Pneumatic system (leak check)				
Hydraulic system (leak check)				
Fuel system (leak check)				
Fluid levels				
Cables and hoses				
Wiring harness				
Loose/missing parts (locking pins, bolts, welds)				
Tire and wheel condition				
Placards and warning signs				
Operational manual stored on lift				
Outriggers/stabilizers				
Guardrail system and locking gate				
Warning system (beacons, lights, horn, etc.)				
Load capacity for job				
Work hazard inspection (weather, overhead, electrical, pedestrian/vehicular traffic, etc.)				
Comments:				
Inspector signature:			Date:	

Appendix B

Pre-Use Ladder Checklist

Pre-use Ladder Checklist

This checklist serves as an example of items to be inspected on a ladder. Refer to the manufacturer's specifications for additional inspection points.

Ladder owner:		Make of ladder:	
Ladder serial #:		Model of ladder:	
Inspector name:		Date of inspection:	

Inspection item	Pass	Fail	N/A	Comments
<i>General</i>				
Manufactures labels present and legible				
Can the ladder support the expected load				
Has the ladder been set-up on a stable and level surface				
Are ladders free of oil, grease, and other slipping hazards				
Are there loose steps/rungs (can they be moved by hand)				
Are there loose nails, screws, bolts or other metal parts				
Are there cracked, split or broken uprights				
Are there cracked, split or broken steps/rungs				
Are there splinters on the uprights or steps/rungs				
Is the ladder long enough to safely reach the intended working height				
Has the ladder been properly secured or barricaded in a high traffic areas				
If a ladder is found to be damaged, has it been placed out of service and labeled as "DO NOT USE"				
<i>Step ladders</i>				
Is the ladder wobbly (from strain)				
Are there loose or bent hinge spreaders				
Are the stops on the hinge spreaders loose or broken				

Inspection Item	Pass	Fail	N/A	Comments
Are the hinges loose or broken				
<i>Extension ladders</i>				
Loose, broken or missing extension locks				
Are there defective locks that do not seat properly when the ladder is extended				
Has the extension rope deteriorated				
<i>Fixed ladders</i>				
Are there damaged or corroded parts on the cage				
Are there damaged or corroded steps/rungs, handrails or anchor points				
Are there protrusions on the cage or ladder that could injure the user				
Comments:				
Inspector signature:			Date:	

Appendix C

Pre-use Scaffold Checklist

Sample scaffold pre-use inspection checklist

This checklist serves as an example of items to be inspected on an aerial lift. Refer to the manufacturer's specifications for additional inspection points.

Scaffold owner:		Make of scaffold:	
scaffold serial #:		Model of scaffold:	
Inspector name:		Date of inspection:	

Inspection item	Pass	Fail	N/A	Comments
Has the scaffolding been erected per the manufacturer's instructions				
Has the scaffolding been constructed by a qualified person				
Are the scaffolding planks free of splits, twists and bows				
Is the scaffold in good repair				
Footing and anchors are sound, rigid, and capable of carrying 4 times the maximum intended load without settling or displacement				
Has the scaffold been set up on an adequate flat base with baseplates on mudsills, screw jacks, etc.				
Have all connections been pinned or fastened securely				
Are cross braces in place				
If wheels are in use, have they been locked into place				
If the base of scaffolding is on the ground, has it been supported by appropriate mud sills				
Are scaffold planks certified scaffold planks or structural lumber				
Do planks overlap the end of the scaffold no less than 6 inches and no more than 12 inches				
Has the working surface of the scaffold been fully planked				
Have the planks been secured to prevent slipping				
Is the gap between planks is less than 1 inch to prevent tools, etc., from falling through				
Is the distance between the scaffold and the working surface is less than 14 inches				
Are gates or bars used to enclose the top level				

Inspection Item	Pass	Fail	N/A	Comments
Has the scaffold been tied off if it is more than four times the width of the base				
Do all open sides and ends of scaffold more than 10 feet above the base have top rails, midrails, and toeboards				
Are guardrails capable of withstanding 200 pounds of force anywhere along the top rail				
Comments:				
Inspector signature:			Date:	