

Positive Electric Co. Job Hazard Analysis

**Project:
Essex County College Library**

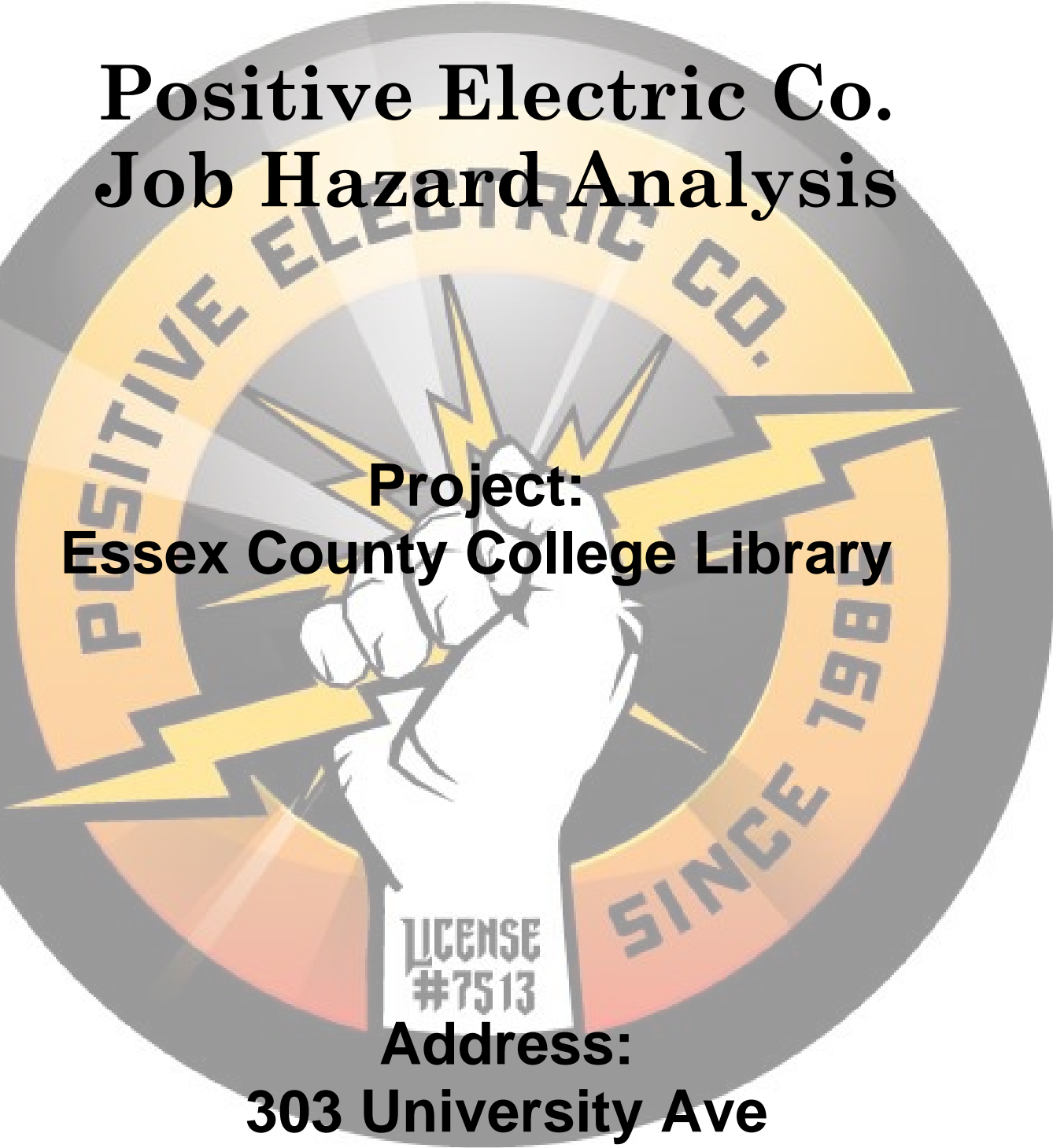
Address:

**303 University Ave
Newark, NJ 07102**

**LICENSE
#7513**

POSITIVE ELECTRIC CO.

SINCE 1981



JOB HAZARD ANALYSIS

Project:		Location:	
Date Analysis Completed:		Reviewed:	
Company	Positive Electric Co.		
		Job Description:	Electrical Work

Job site rules	<ul style="list-style-type: none"> All personnel on site must wear the following PPE: Hard hat, eye protection, long pants, shirts with sleeves, safety footwear for construction, No alcohol or drugs are permitted on property. No horseplay, harassment, or bullying is permitted. Cell phones are never to be used while operating equipment or while working from heights. Before using the cell phone look at your surroundings and get to a spot out of the way of potential danger. Do not stand in areas of travel, especially equipment travel.
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Sequence of Work	Potential Hazards	Eliminate or Control Method
Mobilization	Exposure to vehicular and worker traffic Slip, trip, and fall hazards	<ul style="list-style-type: none"> Perform delivery and mobilization work inside the construction area. If not, spotters must be used. . Maintain good housekeeping. Implement the policy “clean as you go” to prevent slip, trip and fall hazards. Maintain clear paths of travel inside the construction area.
Underground Utility Work	Untrained Personnel Potential Equipment Failure	<ul style="list-style-type: none"> Ensure only trained personnel will operate the piece of equipment. Read the manufacturer’s instructions and prepare to comply with them. Note: Each type and piece of equipment is different. Trained in one piece of heavy equipment does not qualify one to operate another. Perform and document an inspection of the lift daily prior to use according to the manufacturer’s instructions. If there are any deficiencies, do not use the equipment and remove it from service until a trained person makes it safe. Wear safety glasses and gloves Wear high visibility safety vest while around heavy equipment.
Use of Heavy Equipment	Striking Underground Utilities	<ul style="list-style-type: none"> If will be doing any excavation, notify dig alert and wait for utility markings before beginning to dig. Use a spotter while excavating. Ensure there is clear communication with the entire crew regarding the location of underground utilities.
	Striking Overhead Power Lines	<ul style="list-style-type: none"> Keep all parts of the lift at least 10’ away from high voltage power lines of 50kv or less. If there are lines over 50kv, consult the OSHA standard for the necessary distance.

		<ul style="list-style-type: none"> • Use a spotter if the equipment has the ability to reach within the distances noted above.
	Struck-by hazard	<ul style="list-style-type: none"> • Equipment operator to operate in a controlled and safe manner. Know the lift controls and any residual energy that occurs after disengaging a control. • Depending on the area of work, may need to delineate / barricade the work area to prevent unauthorized personnel from entering • In general, personnel should be outside of the swing radius of the machine. A spotter should be in clear view of the work, clear view of the operator, and clear view of any who may attempt to pass by. • Do not approach or pass by an equipment operator unless you have made eye contact with the operator and wait for him to give permission to approach or pass. Stay out of the blind spots. • Only use approved attachments and only use qualified riggers to rig. Only rig according to the manufacturer's instructions. • When changing attachments, ensure the area is clear of people and ensure the attachments are secure before resuming work.
	Cave-in Hazard	<ul style="list-style-type: none"> • A competent person to inspect trench daily prior to employees entering. Trenches that are 5' or deeper or otherwise show signs of potential cave in will be protected by either benching, sloping, or the use of a shield/shoring. Protective systems will be implemented / installed per Cal/OSHA regulations for the type of soil that is determined by the competent person. • Only use rated rigging equipment to raise and lower piping, shoring, and other items. All personnel to remain out of the drop zone of piping when it is being placed. • Keep spoils and all other material at least 2' from edge of trench.
Use of Ladders in Trench	Falls	<ul style="list-style-type: none"> • Use only type 1, 1A, or 1AA ladders and ensure they will support the intended weight capacity. Use only an extension type ladder for trench egress. Extension type ladders to be in trench within 25' of any employee working when trench is 4' or more in depth. • Inspect the ladders prior to use. If defective, tag them out and remove from the site. • Set up the ladder in a safe area for access and egress. Secure the ladder. Three points of contact must always be maintained when ascending or descending ladders. • Ladders must not be climbed by more than one person at a time. • Never stand on the top two steps of a ladder and do not overreach while using the ladder.
Electrical work (running conduit and wiring)	Falls Possible electrical shock	<ul style="list-style-type: none"> • No work will be performed live and lockout tagout will be followed. • Wear safety glasses and cut resistant gloves <p>Hand and power tools – general</p> <ul style="list-style-type: none"> • Only use a tool if you are trained how to use it.

- Read and understand the manufacturer instructions. Only use the tool for its designated purpose.
- Inspect the tool before use. Ensure it is clean and in good repair.
- Wear PPE including eye protection and hearing protection
- Keep hands free of pinch points
- Keep safety guards in place.
- Inspect the electrical cord to ensure it is in safe condition.
- Ensure extension cords are in good condition, are of construction grade and are of proper gauge for the work to be done. Do not overload circuits.
- Remove any damaged or unsafe tools from service and notify your supervisor. Mark it “Defective”.
- Do not leave power tools unattended.

Ladders

- Do not leave power tools unattended.
- Use only type 1, 1A, or 1AA ladders and ensure they will support the intended weight capacity.
- Inspect the ladders prior to use. If defective, tag them out and remove from the site.
- When using step ladders, they must be set up as designed, including being fully opened.
- Do not place ladders in passageways, doorways, drives, or any locations where they may be displaced by any other work unless protected by barricades or guards.
- Three points of contact must always be maintained when ascending or descending ladders. Only use ladders for their intended purpose and manufacturer’s recommendations.
- Ladders must not be climbed by more than one person at a time.
- Never stand on the top two steps of a ladder and do not overreach while using the ladder.

Scissor Lift

- Only trained personnel can operate the lift.
- Inspect the work area for loose or soft ground, ditches, drop offs and other obstructions, debris, and other possible hazards. Prepare to operate on level ground and use stabilizers or outriggers if equipped and per the manufactures specifications.
- When entering the lift, close the gate behind you (or put the mid chain in place).
- Do not exceed the weight capacity of the lift. Follow the manufacturer’s instructions for max number of workers in the lift.
- Operate in a slow, safe manner. Use horn when approaching blind

		<p>corners. Use a spotter when in tight area.</p> <ul style="list-style-type: none"> • Do not lift or lower above others. No personnel may pass under or near the lift. • Do not work near exits / doorways unless there is a spotter, or delineation and signage has been placed that gives a proper warning to others. • Secure any tools and material inside the lift. • Never climb on the rails of the lift. Keep both feet on the platform. • Keep all parts of the lift at least 10' away from high voltage power lines of 50kv or less. • Operate the lower controls only for pre-operational checks and in the event of an emergency, for maintenance or when unoccupied.
<p>Install FA and fiber optic cable and low voltage wiring (Use of ladders and scissor lift)</p>	<p>Lacerations, eye hazard, falls, Scissor lift tip over</p>	<ul style="list-style-type: none"> • Wear safety glasses and work gloves • No work above 6'in height without fall protection. Ladders and Scissor lifts to be used. <p>Scissor Lift</p> <ul style="list-style-type: none"> • Only trained personnel can operate the lift. • Inspect the work area for loose or soft ground, ditches, drop offs and other obstructions, debris, and other possible hazards. Prepare to operate on level ground and use stabilizers or outriggers if equipped and per the manufacture's specifications. • When entering the lift, close the gate behind you (or put the mid chain in place). • Do not exceed the weight capacity of the lift. Follow the manufacturer's instructions for max number of workers in the lift. • Operate in a slow, safe manner. Use horn when approaching blind corners. Use a spotter when in tight area. • Do not lift or lower above others. No personnel may pass under or near the lift. • Do not work near exits / doorways unless there is a spotter, or delineation and signage has been placed that gives a proper warning to others. • Secure any tools and material inside the lift. • Never climb on the rails of the lift. Keep both feet on the platform. • Keep all parts of the lift at least 10' away from high voltage power lines of 50kv or less. • Operate the lower controls only for pre-operational checks and in the event of an emergency, for maintenance or when unoccupied.

		<p>Ladders</p> <ul style="list-style-type: none"> • Do not leave power tools unattended. • Use only type 1, 1A, or 1AA ladders and ensure they will support the intended weight capacity. Only use non-conductive ladders • Inspect the ladders prior to use. If defective, tag them out and remove from the site. • When using step ladders, they must be set up as designed, including being fully opened. • Do not place ladders in passageways, doorways, drives, or any locations where they may be displaced by any other work unless protected by barricades or guards. • Three points of contact must always be maintained when ascending or descending ladders. Only use ladders for their intended purpose and manufacturer’s recommendations. • Ladders must not be climbed by more than one person at a time. • Never stand on the top two steps of a ladder and do not overreach while using the ladder.
<p>Install Fire Alarm Devices</p>	<p>Lacerations, falls, pinch points</p>	<ul style="list-style-type: none"> • Wear safety glasses and gloves <p>Hand and power tools – general</p> <ul style="list-style-type: none"> • Only use a tool if you are trained how to use it. • Read and understand the manufacturer instructions. Only use the tool for its designated purpose. • Inspect the tool before use. Ensure it is clean and in good repair. • Wear PPE including eye protection and hearing protection • Keep hands free of pinch points • Keep safety guards in place. • Inspect the electrical cord to ensure it is in safe condition. • Ensure extension cords are in good condition, are of construction grade and are of proper gauge for the work to be done. Do not overload circuits. • Remove any damaged or unsafe tools from service and notify your supervisor. Mark it “Defective”. • Do not leave power tools unattended. <p>No work above 6’in height without fall protection. Ladders and Scissor lifts to be used.</p> <p>Scissor Lift</p> <ul style="list-style-type: none"> • Only trained personnel can operate the lift.

- Inspect the work area for loose or soft ground, ditches, drop offs and other obstructions, debris, and other possible hazards. Prepare to operate on level ground and use stabilizers or outriggers if equipped and per the manufacture's specifications.
- When entering the lift, close the gate behind you (or put the mid chain in place).
- Do not exceed the weight capacity of the lift. Follow the manufacturer's instructions for max number of workers in the lift.
- Operate in a slow, safe manner. Use horn when approaching blind corners. Use a spotter when in tight area.
- Do not lift or lower above others. No personnel may pass under or near the lift.
- Do not work near exits / doorways unless there is a spotter, or delineation and signage has been placed that gives a proper warning to others.
- Secure any tools and material inside the lift.
- Never climb on the rails of the lift. Keep both feet on the platform.
- Keep all parts of the lift at least 10' away from high voltage power lines of 50kv or less.
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Ladders

- Do not leave power tools unattended.
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- Inspect the ladders prior to use. If defective, tag them out and remove from the site.
- When using step ladders, they must be set up as designed, including being fully opened.
- Do not place ladders in passageways, doorways, drives, or any locations where they may be displaced by any other work unless protected by barricades or guards.
- Three points of contact must always be maintained when ascending or descending ladders. Only use ladders for their intended purpose and manufacturer's recommendations.
- Ladders must not be climbed by more than one person at a time.
- Never stand on the top two steps of a ladder and do not overreach while using the ladder.

<p>Switchboard panels, disconnect switches and transformers</p>	<p>Slip and falls, lacerations, electric shock</p>	<ul style="list-style-type: none"> • Maintain good housekeeping • Wear work gloves • Follow lockout/tagout procedures for shutdown of existing system. <p>Hand and power tools – general</p> <ul style="list-style-type: none"> • Only use a tool if you are trained how to use it. • Read and understand the manufacturer instructions. Only use the tool for its designated purpose. • Inspect the tool before use. Ensure it is clean and in good repair. • Wear PPE including eye protection and hearing protection • Keep hands free of pinch points • Keep safety guards in place. • Inspect the electrical cord to ensure it is in safe condition. • Ensure extension cords are in good condition, are of construction grade and are of proper gauge for the work to be done. Do not overload circuits. • Remove any damaged or unsafe tools from service and notify your supervisor. Mark it “Defective”. • Do not leave power tools unattended. <p>Ladders</p> <ul style="list-style-type: none"> • Do not leave power tools unattended. • Use only type 1, 1A, or 1AA ladders and ensure they will support the intended weight capacity. • Inspect the ladders prior to use. If defective, tag them out and remove from the site. • When using step ladders, they must be set up as designed, including being fully opened. • Do not place ladders in passageways, doorways, drives, or any locations where they may be displaced by any other work unless protected by barricades or guards. • Three points of contact must always be maintained when ascending or descending ladders. Only use ladders for their intended purpose and manufacturer’s recommendations. • Ladders must not be climbed by more than one person at a time. • Never stand on the top two steps of a ladder and do not overreach while using the ladder.
<p>Install light fixtures, receptacles, switches, and devices</p>	<p>Slip and falls, lacerations, electric shock</p>	<ul style="list-style-type: none"> • Maintain good housekeeping • Wear work gloves • Follow lockout/tagout procedures for shutdown of existing system.

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<p>Install voice data, fiber optic, cabling, and devices</p>	<p>Slip and falls, lacerations, electric shock</p>	<ul style="list-style-type: none"> • Maintain good housekeeping • Wear work gloves • Follow lockout/tagout procedures for shutdown of existing system. <p>Hand and power tools – general</p> <ul style="list-style-type: none"> • Only use a tool if you are trained how to use it. • Read and understand the manufacturer instructions. Only use the tool for its designated purpose. • Inspect the tool before use. Ensure it is clean and in good repair. • Wear PPE including eye protection and hearing protection

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This plan will be reviewed with each employee prior to work on the project:

Name	Signature	Company	Date