

# Construction Safety

## Layered Process Audit (LPA) Deployment Template

Standard: OSHA 29 CFR 1926 /  
ANSI/ASSP Z10

45

Total Questions

3

Audit Layers

60 min

Total Duration

Layer	Role	Questions	Time	Frequency
L1	Craft Worker / Foreman	20 Q	25 min	Daily — pre-task every shift
L2	Site Superintendent / Safety Officer	15 Q	20 min	Weekly — all active work zones
L3	Project Manager / EHS Director	10 Q	15 min	Monthly — site-wide safety review

*Complete all three layers for comprehensive process verification. Each layer builds upon the previous, providing systemic quality assurance from operator to engineering leadership.*

# LAYER 1: OPERATOR AUDIT

20 Questions | 25 min | Daily — each production shift

ID	Question & Criteria	Response			
<b>A1</b>	<b>Pre-Task Plan (PTP) Completed</b> Job Hazard Analysis (JHA) or Pre-Task Plan completed for today's specific scope of work. Signed by all workers on task. Addresses site-specific hazards.	Y	N	N/A	Notes
<b>A2</b>	<b>Required Permits Active</b> All required work permits obtained and posted: hot work, confined space, energized electrical, excavation, crane pick. Permit conditions being followed. Not expired.	Y	N	N/A	Notes
<b>A3</b>	<b>Plan &amp; Specification Currency</b> Workers have current construction drawings and specifications at point of work. Latest RFI responses and addenda incorporated. No superseded plans in use.	Y	N	N/A	Notes
<b>A4</b>	<b>Work Zone Demarcation</b> Active work zone barricaded or cordoned off. Warning tape, cones, or hard barricades appropriate for hazard level. Signage visible to non-workers and public.	Y	N	N/A	Notes
<b>A5</b>	<b>PPE Compliance — All Workers</b> All workers in the area wearing required PPE: hard hat, ANSI-rated safety glasses, hi-viz vest, safety-toe boots. Additional PPE (gloves, hearing, respirator) per task JHA.	Y	N	N/A	Notes
<b>A6</b>	<b>Fall Protection — 6-Foot Rule</b> All workers at or above 6 feet (4 feet for general industry criteria) protected by guardrail, safety net, or personal fall arrest system (PFAS). No unprotected edges.	Y	N	N/A	Notes
<b>A7</b>	<b>Ladder Safety</b> Portable ladders tied off or held, 3-point contact observed, extended 3 feet above landing, correct angle (4:1). Extension ladder rated for load. No metal ladders near electrical.	Y	N	N/A	Notes
<b>A8</b>	<b>Scaffold Inspection Tag Current</b> Scaffold has current inspection tag (green = OK, red = do not use). Inspection performed by competent person this week. Guardrails, mid-rails, toe boards installed.	Y	N	N/A	Notes
<b>A9</b>	<b>Excavation &amp; Trenching Safety</b> Excavations > 5 ft have adequate sloping, shoring, or trench box. Competent person inspection completed today. Spoil pile > 2 ft from edge. Entry/exit every 25 ft.	Y	N	N/A	Notes
<b>A10</b>	<b>Electrical Safety &amp; LOTO</b> Temporary power: GFCI on all 120V circuits outdoors and in wet locations. LOTO applied to all de-energized equipment before work. No energized work without energized electrical permit.	Y	N	N/A	Notes
<b>A11</b>	<b>Struck-By Hazard Controls</b> Overhead work: barricade exclusion zone below. Crane swing radius controlled. Vehicles in work zone: spotters used. Workers not between equipment and fixed object. High-vis worn.	Y	N	N/A	Notes
<b>A12</b>	<b>Tool &amp; Equipment Condition</b> Hand tools inspected — no cracked handles, damaged insulation. Power tools: guards in place, GFCIs used. Powder-actuated tools: licensed operator only. Color-coded inspection current.	Y	N	N/A	Notes
<b>A13</b>	<b>Material Storage &amp; Housekeeping</b> Materials stored in designated areas — not in walkways or emergency egress. Excess material and debris removed daily. Nails hammered or removed from scrap lumber.	Y	N	N/A	Notes

**A14 Crane & Rigging Safety**

Crane daily inspection log completed. Rigging hardware rated and inspected — no hook latch defeats, no kinked wire rope. No workers under suspended loads. Load chart accessible.

Y	N	N/A	Notes
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**A15 Concrete / Masonry Safety**

Silica control plan active: wet cutting, vacuum, or enclosure used — no dry grinding without controls. Concrete forms properly shored. Masonry walls braced until structurally stable.

Y	N	N/A	Notes
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**A16 Fire Prevention & Hot Work**

Hot work permit obtained. Fire watch posted with extinguisher during and 30 min after. Combustibles cleared or shielded in 35-foot radius. Fire extinguisher inspections current.

Y	N	N/A	Notes
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**A17 Chemical Hazard & SDS Access**

All chemical containers labeled (GHS format). SDS available at point-of-use or in site box. Workers trained on chemicals in use. Spill kit available in proximity.

Y	N	N/A	Notes
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**A18 First Aid & Emergency Readiness**

First aid kit stocked and accessible. AED available if site > 25 workers. Emergency numbers posted. Nearest hospital route known. First aid-trained person on-site per OSHA requirement.

Y	N	N/A	Notes
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**A19 Subcontractor Safety Compliance**

All subcontractor workers verified with site safety orientation. Subcontractor supervisor aware of current hazards. Sub's equipment meets site inspection standards.

Y	N	N/A	Notes
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**A20 Incident & Near-Miss Reporting**

Any near-miss, first aid, or unsafe condition reported to site safety officer same day. Incident form completed. Scene preserved for investigation. No pressured under-reporting.

Y	N	N/A	Notes
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■ Note: Pre-task LPAs must be completed BEFORE work begins each shift. Stop-work authority is available to ALL workers — no seniority required to exercise it.

LAYER SCORE	___ / 20	AUDITOR	_____	DATE	_____
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# LAYER 2: SUPERVISOR / QUALITY AUDIT

15 Questions | 20 min | Weekly — all production areas

ID	Question & Criteria	Response			
<b>F1</b>	<p><b>Daily PTP / JHA Completion Rate</b></p> <p>Confirm &gt; 95% of active crews completed PTP/JHA this week. Spot-check signing — all workers signed, not bulk-signed by foreman only.</p>	Y	N	N/A	Notes
<b>F2</b>	<p><b>Safety Observation Coverage</b></p> <p>Safety observations distributed across all active work areas, trades, and shifts this week. High-hazard tasks (elevated work, confined space, crane) observed directly.</p>	Y	N	N/A	Notes
<b>F3</b>	<p><b>Hazard Finding Pareto</b></p> <p>Top 3 safety finding categories this week identified (fall protection, housekeeping, PPE, electrical, etc.). Trend vs. prior 4 weeks reviewed. Seasonal/scope-change hazards flagged.</p>	Y	N	N/A	Notes
<b>F4</b>	<p><b>Repeat Unsafe Condition Rate</b></p> <p>Same unsafe condition recurring in same work area &lt; 10% of weekly observations. Repeat conditions trigger formal stand-down or corrective action by superintendent.</p>	Y	N	N/A	Notes
<b>F5</b>	<p><b>OSHA-Recordable / Serious Incident Escalation</b></p> <p>All OSHA-recordable injuries, first aids (beyond minor), and high-potential near-misses escalated to EHS Director and Project Manager within 4 hours. Incident log updated.</p>	Y	N	N/A	Notes
<b>G1</b>	<p><b>Root Cause Analysis — Incidents</b></p> <p>RCA for all recordable incidents and high-potential near-misses completed within 5 business days. System/organizational causes identified beyond immediate cause.</p>	Y	N	N/A	Notes
<b>G2</b>	<p><b>Corrective Action Implementation</b></p> <p>CAs address root cause: additional engineering controls, procedure revision, training, supervisor coaching. Actions tracked in safety management system.</p>	Y	N	N/A	Notes
<b>G3</b>	<p><b>CA Effectiveness (30-Day Re-Check)</b></p> <p>Areas and tasks targeted by prior CAs re-audited at 30 days. Unsafe condition recurrence rate confirms improvement. CA closed with evidence or re-opened if ineffective.</p>	Y	N	N/A	Notes
<b>G4</b>	<p><b>Safety Lessons Learned Shared</b></p> <p>Incident and near-miss lessons shared with all crews at toolbox talk. Similar task crews and sister sites notified. Acknowledgment documented.</p>	Y	N	N/A	Notes
<b>H1</b>	<p><b>Site Safety Plan vs. Current Scope</b></p> <p>Site-Specific Safety Plan (SSSP) matches current scope of work. New activities (trenching, crane erection, roofing) added with appropriate hazard controls before work starts.</p>	Y	N	N/A	Notes
<b>H2</b>	<p><b>OSHA Required Program Currency</b></p> <p>Written programs (fall protection, HazCom, respiratory, LOTO, excavation) current and accessible on-site. Programs reviewed when scope changes.</p>	Y	N	N/A	Notes
<b>H3</b>	<p><b>High-Hazard Task Observation</b></p> <p>Elevated, confined space, crane, and excavation tasks observed directly by site superintendent or safety officer at least once this week. Observations documented.</p>	Y	N	N/A	Notes
<b>H4</b>	<p><b>Safety Training Compliance</b></p> <p>All workers have required training: OSHA 10/30, site orientation, task-specific (fall, confined space, rigging). Training records in site safety file.</p>	Y	N	N/A	Notes

**I1**

**Stop-Work Authority Use**

Any Stop-Work Authority (SWA) exercised this week: documented, hazard corrected, work resumed only after safety verification. No retaliation for SWA use.

Y	N	N/A	Notes
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**I2**

**OSHA Compliance Status**

No open OSHA citations unresolved from prior inspections. Abatement dates met. No repeat violations from prior inspections in same trade or hazard category.

Y	N	N/A	Notes
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LAYER SCORE	___ / 15	AUDITOR	_____	DATE	_____
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# LAYER 3: ENGINEERING / MANAGEMENT AUDIT

10 Questions | 15 min | Monthly — system review

ID	Question & Criteria	Response			
J1	<b>Total Recordable Incident Rate (TRIR)</b> Site TRIR compared to industry benchmark (BLS NAICS average). Rolling 12-month trend reviewed. Proactive leading indicator metrics tracked alongside lagging TRIR.	Y	N	N/A	Notes
J2	<b>High-Potential Near-Miss Trend</b> High-potential near-misses (incidents where serious injury was narrowly avoided) tracked separately. Trend reviewed monthly. High-potential events treated like recordables for RCA purposes.	Y	N	N/A	Notes
J3	<b>Safety Observation Frequency vs. Plan</b> Total safety observations completed this month vs. plan (site size, workforce). Observation-to-finding ratio and positive observation rate reviewed alongside negative findings.	Y	N	N/A	Notes
J4	<b>Safety Equipment Inspection Compliance</b> All required equipment inspections current: crane annual, rigging quarterly, scaffold weekly, fall protection pre-use. No inspection overdue. Defective equipment tagged out.	Y	N	N/A	Notes
K1	<b>SSSP Updated to Current Phase</b> Site Safety Plan reviewed and updated for current phase of construction. Emergency response contacts current. Site emergency procedures reviewed with all foremen this month.	Y	N	N/A	Notes
K2	<b>Design Change Safety Review</b> All design changes (scope, methods, materials) reviewed through safety lens before implementation. Engineering MOC/design review includes safety assessment.	Y	N	N/A	Notes
K3	<b>Risk Register Current</b> Site risk register reviewed and updated this month. New hazards from scope changes added. High-priority risks have documented mitigation measures verified as active.	Y	N	N/A	Notes
L1	<b>Safety Innovation / Best Practice</b> At least one safety improvement (new control, better PPE, revised procedure) implemented this month. Results measured and shared with project team and client.	Y	N	N/A	Notes
L2	<b>LPA Program Trend — All Work Areas</b> LPA scores across all work areas and subcontractors stable or improving over 90 days. Low-performing areas have dedicated safety walk-arounds with site leadership.	Y	N	N/A	Notes
L3	<b>Subcontractor Safety Performance Review</b> All active subcontractor safety performance reviewed monthly: incident rates, LPA scores, observation rates. Underperforming subs on formal improvement plan.	Y	N	N/A	Notes

LAYER SCORE	___ / 10	AUDITOR	_____	DATE	_____
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# LAYER 0: LPA MATURITY SCORING & TOTAL

Questions | min |

Score	Performance Level	Required Action
100%	World Class	Document & share best practices across all lines
90–99%	Strong	Monitor for drift; schedule quarterly reviews
80–89%	Capable	Focus improvement resources on identified gaps
70–79%	At Risk	Management review within 5 business days
< 70%	Critical	Stop production; mandatory corrective action plan

<b>TOTAL SCORE</b>	<b>_____ / 45</b>	<b>% Score</b>	<b>_____ %</b>
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## Industry-Specific Notes

Construction LPAs support OSHA 29 CFR 1926 compliance and ANSI/ASSP Z10 occupational safety management. The leading cause of construction fatalities — the 'Fatal Four' (falls, struck-by, caught-in/between, electrocution) — must have specific controls verified daily. All OSHA-required programs (fall protection, excavation, scaffolding, crane safety) must be written, current, and accessible on-site. Subcontractors are subject to the same LPA requirements as prime contractor workers on site. Emergency response plans, emergency contact numbers, and first aid resources must be verified at site level at least weekly.

## Audit Sign-Off

Auditor Name	Signature	Date Completed
Reviewed By	Title / Role	Next Audit Due