DECONSTRUCTION TECHNICIAN WORK PROCESS SCHEDULE

Description: Unbuild structures partially or fully and salvage as much viable building material as possible. Document and research the structure prior to deconstruction. Handle materials and process for resale and reuse. Craft new goods with saved materials.

Term: Time-based (estimated 4,000 hours) it is intended that after 4,000 hours of on-the-job learning (OJL) including a minimum of 320 hours of related instruction, the apprentice will demonstrate competence in the skills outlined below. Select apprentices will be able to demonstrate competence and receive advanced placement in the program.

On-The-Job Learning: Apprentices will receive training in the various work experiences listed below. The order in which this training is given will be determined by the flow of work on-the-job and will not necessarily be in the order listed. The times allotted to these various processes are the estimated times which the average apprentice will require to learn each phase of the occupation. They are intended only as a guide to indicate the quality of the training being provided and the ability of the apprentice to absorb this training in an average amount of time. The suggested related instruction supplements OJL, follows the work processes schedule.

Competencies

4000 hours

I. Historic Preservation Fundamentals

400

- I.1 Document existing structure with photographs and field measurements.
- 1.2 Create field sketches.
- 1.3 Research and record the structure's history using primary and secondary documents.
- I.4 Assess the pathology and safety of the structure.
- 1.5 Adhere to local, state, and federal regulations regarding historic resource management.

II. Construction Fundamentals

300

- II.1 Perform accurate construction math relevant to the worksite.
- II.2 Draft and sketch architectural drawings.
- II.3 Read, understand and apply architectural plans, specifications, drawings, sketches, and codes.

III. Safety Rules and Practices

1000

- III.1 Demonstrate proper and safe use of hands tools, including but not limited to hammers, pry bars, crow bars, screw drivers, hand saws, and punches.
- III.2 Demonstrate proper and safe use of field power tools, including but not limited to table saws, miter saws, grinders, sanders, generators, impact drivers, drills, and reciprocating saws.
- III.3 Demonstrate proper and safe use of shop tools, including but not limited to table saws, shapers, planers, drum sanders, column sanders, miter saws, band saws, and dust collectors.
- III.4 Employ safe lifting and carrying practices.
- III.5 Use correct personal protection equipment and procedures, including but not limited to hard hats, goggles, gloves, proper clothing, suits, respirators, hearing protection, and fall protection.
- III.6 Erect, construct and modify staging, ladders, scaffolding and work platforms.

- III.7 Maintain proper Hazardous Communication Program.
- III.8 Apply Material Safety Data information to material use.
- III.9 Recognize hazardous materials and mitigate, following related safety protocols for those materials, including but not limited to lead and asbestos (certification required).
- III.10 Mitigate site hazards through appropriate use of air shields and barriers, filters, ground covers, and erosion control.
- III.11 Maintain orderly, clean, and organized job and work sites.
- III.12 Properly and safely load, stack, and strap materials into truck beds, closed trailers, and/or flatbed trailers according to best practices.
- III.13 Adhere to applicable local, state and federal regulations (EPA [environmental], DOT [moving vehicle] and OSHA [worker safety]).
- III.14 Safely drive pick-up trucks.
- III.15 Safely hitch, drive, and reverse trailers for pick-up trucks.
- III.16 Demonstrate first aid for occupational hazards.

IV. Building Systems 1000

IV.1 Unbuild a structure, including roofing, load-bearing and non-load bearing walls, masonry, floor systems, fenestrations, and electrical and plumbing systems.

IV.2 Build structural strapping and brace structures for safe unbuilding.

V. Material Skills

- V.1 Identify viable building materials and pre-process goods for merchandising, including but not limited to denailing, cutting, sorting, and stacking.
- V.2 Stack materials for transport on trailers, flatbeds, and pallets.
- V.3 Denail and remove defects from lumber.
- V.4 Measure, label, and document materials' provenance.
- V.5 Clean mortar from masonry units.
- V.6 Stack and merchandise materials, maintain orderly, clean and organized facilities.
- V.7 Draft production plans including but not limited to sketching, dimensions, creating a cut list, and estimating.
- V.8 Process salvaged wood into dimensional lumber.
- V.9 Cut, shape, sand, and clean historic and wooden workpieces using tools and materials including but not limited to saws, drills, and abrasives.
- V.10 Employ a variety of joinery methods to join lumber cuts, including but not limited to mortises and tenons, dowels, adhesives, nails, screws, and clamps.
- V.11 Apply different finishes to wood surfaces following best practices.
- V.12 Safely identify and manage hazardous materials on site and in the shop.

VI. Project and Business Management

300

- VI.1 Maintain inventories of tools, supplies, and materials.
- VI.2 Estimate project materials and labor.
- VI.3 Market materials for sale.
- VI.4 Perform sales and keep accurate accounts of transactions.

Related Instruction

320 hours

I. His	toric Preservation Fundamentals		90
I.A	Historic Preservation Fundamentals	30	
I.B	Structural Theory and Pathology	30	
I.C	Historic Research and Documentation	30	
II. Construction Fundamentals			15
II.A	Drafting and Blueprint Reading	15	
III. Safety Rules and Practices			80
III.A	Professional Tool Use and Safety	30	
III.B	OSHA 30	30	
III.C	LeadSafe RRP	16	
III.D	First Aid	4	
IV. Building Systems			90
IV.A	Windows, Doors, and Millwork	45	
IV.B	Carpentry of Buildings	45	
V. Material Skills and Science			30
V.A	Wood	15	
V.B	Masonry	15	
VI. Project and Business Management			15
VI.A	Project and Small Business Management	15	