This master should be used by designers working on Port of Portland construction projects and by designers working for PDX tenants (“Tenants”). Usage notes highlight a few specific editing choices, however the entire section should be evaluated and edited to fit specific project needs.

SECTION 017329 - CUTTING AND PATCHING

1. GENERAL
   * + 1. DESCRIPTION
          1. This section includes cutting, coring, fitting, and patching as required in existing construction.
          2. Perform the work of this section as necessary to:

Complete the work.

Fit products together to integrate with other work.

Provide openings for penetration of mechanical, electrical, and other services.

Match work that has been cut to adjacent work.

Repair areas adjacent to cuts to required condition.

Repair existing areas and new work damaged by subsequent work.

Remove and replace defective and non-conforming work.

Repair or removal of hazardous or unsanitary conditions.

Uncover portions of the work to provide for installation of ill‑timed work.

Remove abandoned items and items serving no useful purpose, such as abandoned piping, conduit and wiring.

* + - * 1. Upon Written Instructions:

Uncover designated portions of the work for observation of covered work.

Remove samples of installed materials for testing beyond that specified.

Remove work to provide for alteration of previously installed work.

* + - 1. SUBMITTALS
         1. Submit a written request to the Port prior to cutting, coring, or alteration which affects the work, the existing facility, or which may affect the structural safety of any portion of the facility. Include:

Identification of the project.

Description of the affected work.

The necessity for doing the cutting, coring, or alteration.

The effect on the work, the existing facility, or the structural integrity of the facility.

Description of the proposed work:

The scope of cutting, patching, coring, or alteration.

The Contractor and trades who will execute the work.

Products proposed to be used.

Alternatives to cutting, coring, or patching.

* + - * 1. Submit a written notice to the Port designating the date and the time the work will begin.
      1. UTILITY SERVICES
         1. Maintain existing utilities indicated to remain, keep in service, and protect against damage.
         2. Include interruptions to existing utilities in the Work Progress Schedule.

Tenants: For work at PDX, delete “Port” and replace with name of tenant and Port of Portland.

* + - * 1. Confirm scheduled interruptions with the Port 7 to 14 days in advance of the scheduled interruption. Do not proceed until Port approval has been obtained.

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* + - * 1. Maintain operation of existing fire sprinkler system. Notify the Port 7 days before system or parts of system must be inactive to allow tie-in of new work. Minimize hazardous exposures during time fire sprinkler system is out of service.

1. PRODUCTS
   * + 1. MATERIALS
          1. New Materials: Use materials specified in technical sections of these specifications.
          2. Existing Materials: Determine type and quality of existing materials by inspecting and testing products where necessary.
2. EXECUTION
   * + 1. INSPECTION
          1. Inspect existing conditions of the project, especially elements subject to damage or to movement during cutting, coring, patching, and alterations.
          2. Comply with the requirements of Section 017000, Execution Requirements, for investigation prior to penetration of floor slabs.
          3. After uncovering work, inspect the conditions affecting the installation of products or performance of the work.
          4. Report unsatisfactory or dubious conditions to the Port in writing. Proceed with the work only after the Port has provided further instructions.
       2. PREPARATION
          1. Provide shoring, bracing, and other support as necessary to prevent movement of the structure and to assure the structural safety of that portion of the work.
          2. Provide devices and methods to protect the existing facility and other portions of the work from damage.
          3. Provide protection from the elements for that portion of the existing facility and work which will be exposed by cutting and patching and alterations work.

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* + - * 1. Roofing: Before work begins near the existing roof, conduct a meeting with the Port. The roof shall be maintained waterproof during the construction period. Do not store materials on the roof.
      1. CUTTING AND PATCHING
         1. Execute cutting, coring, and demolition by methods which will assure safety, will prevent damage to other work or existing areas to remain, and will provide proper surfaces to receive repairs.
         2. Pneumatic tools will not be allowed without prior written approval.
         3. Fit work air-tight to pipes, sleeves, ducts, conduit, and other penetrations through surfaces.
         4. At penetrations of fire rated walls, partitions, ceiling, or floor construction, completely seal voids with fire rated material, to full thickness of the penetrated element.
         5. Execute fitting and adjustment of products to provide a finished installation to comply with specified products, functions, tolerances, and finishes. Where not specified, match existing materials and finishes for color, texture, and appearance.
         6. Where removal results in adjacent spaces becoming one, rework floors and ceilings to provide smooth planes without breaks, steps or bulkheads, unless otherwise indicated.
         7. Unless shown otherwise, perform cutting so that a smooth transition with new work is possible and terminate existing surface along a straight line at a natural line of division.
         8. Where a change of plane of 1/4 inch or more occurs in existing work, submit recommendation for providing a smooth transition for Port review and request instructions.
         9. Restore work that has been cut or removed.
         10. When new work abuts or finishes flush with existing work, make a smooth and workmanlike transition. Patched work shall match existing adjacent work in texture and appearance so that the patch or transition is invisible from a normal viewing distance.
         11. Refinish entire surfaces as necessary to provide an even finish to match adjacent finishes:

For continuous surfaces, refinish to nearest intersection or natural break.

For an assembly, refinish the entire unit.

* + - * 1. At completion of work of each trade, clean area and make surfaces ready for work of successive trades.
        2. Repair patched surfaces that are damaged, lifted, discolored, or showing other imperfections due to patching work. If defects are due to condition of substrate, repair substrate prior to repairing finish.
        3. At completion of work in each area, return space to a condition suitable for use.
      1. ALTERATIONS
         1. Remove existing work as indicated and as required to accomplish new work.

Where new surface finishes are to be applied to existing work, perform removals, patch, and prepare existing surfaces as required to receive new finish; remove existing finish if necessary for successful application of new finish.

Where new surface finishes are not specified or indicated, patch holes and damaged surfaces to match adjacent finished surfaces as closely as possible.

* + - * 1. Adhere to requirements for cutting and patching where applicable.
        2. Drawings showing existing construction and utilities are based on casual field observation and existing record documents only.
        3. Verify that construction and utility arrangements are as shown.

Report discrepancies to the Port before disturbing existing installation.

Beginning of alterations work constitutes acceptance of existing conditions.

* + - * 1. Keep areas in which alterations are being conducted separate from other areas that are still occupied.

Provide, erect, and maintain temporary stanchions or barricades.

Noise, Dust, Vibration, and Odors: Operations that may result in high levels of noise and dust, vibration, odors, or other disruption to occupants will not be allowed without mitigating measures acceptable to the Port.

* + - * 1. Services (including but not limited to HVAC, plumbing, baggage conveyor, fire protection, electrical, and telecommunications): Remove, relocate, and extend existing systems to accommodate new construction.

Maintain existing active systems that are to remain in operation. Maintain access to equipment and operational components and if necessary, modify installation to allow access or provide access panel.

Where existing systems or equipment are not active and the work requires reactivation, put back into operational condition. Repair supply, distribution, and equipment as required.

Where existing active systems serve occupied facilities but are to be replaced with new services, maintain existing systems in service until new systems are complete and ready for service.

a. Disable existing systems only to make switchovers and connections. Minimize duration of outages.

b. Provide temporary connections as required to maintain existing systems in service.

Verify that services shown as abandoned are actually abandoned.

Remove abandoned pipe, ducts, conduits, and equipment, where shown, including those above accessible ceilings. Remove back to source of supply where possible otherwise cap stub and tag with identification. Patch holes left by the removal using materials specified for new construction.

* + - * 1. Clean existing systems and equipment that become unclean due to the work.
        2. Remove demolition debris and abandoned items from work area and dispose of off-site.

END OF SECTION 017329