	Title: YALE OFFICE OF FACILITIES PROCEDURE MANUAL Chapter: 01 – Temporary Facilities & Controls Division: 01 50 00 Standards	Section: 01 50 00 Requirements for Division 1
		Date: July 2025
		Author: Program Support & Technical Services

## GENERAL

### Summary


1. Section includes requirements for temporary utilities, support facilities, and security and protection facilities.
2. Related Requirements:
  - a. Section 011000 "Summary" for work restrictions and limitations on utility interruptions.
  - b. Section 015640 Tree Protection
  - c. Section 014500 Contractor Quality Control

### Use Charges

3. Installation, removal, and use charges for temporary facilities to be included in the Contract Sum unless otherwise indicated. Allow other entities engaged in the Project to use temporary services and facilities without cost, including, but not limited to, Owner's construction forces, Architect, testing agencies, and authorities having jurisdiction.
4. Sewer Service: Owner will pay sewer-service use charges for sewer usage by all entities for construction operations.
5. Water Service: Owner will pay water-service use charges for water used by all entities for construction operations.
6. Electric Power Service: Owner will pay electric-power-service use charges for electricity used by all entities for construction operations.

### Informational Submittals

7. Site Utilization Plan: Show temporary facilities, temporary utility lines and connections, staging areas, construction site entrances, vehicle circulation, and parking areas for construction personnel.
8. Implementation and Termination Schedule: Within 15 days of date established for commencement of the Work, submit schedule indicating implementation and termination dates of each temporary utility.
9. Project Identification and Temporary Signs: Show fabrication and installation details, including plans, elevations, details, layouts, typestyles, graphic elements, and message content. All project signage and fence scrim shall be approved by Yale prior to installation.
10. Erosion and sediment control plan: Section 31 25 00 "Soil Erosion and Sediment Control".
11. Fire-Safety Program: Show compliance with requirements of NFPA 241 and authorities having jurisdiction. Indicate Contractor personnel responsible for management of fire-prevention program.
12. Moisture- and Mold-Protection Plan: Describe procedures and controls for protecting materials and construction from water absorption and damage and mold. Describe delivery, handling, storage, installation, and protection provisions for materials subject to water absorption or water damage.
  - a. Indicate procedures for discarding water-damaged materials, protocols for mitigating water intrusion into completed Work, and requirements for replacing water-damaged Work.

	Title: YALE OFFICE OF FACILITIES PROCEDURE MANUAL Chapter: 01 – Temporary Facilities & Controls Division: 01 50 00 Standards	Section: 01 50 00 Requirements for Division 1
		Date: July 2025
		Author: Program Support & Technical Services

- b. Indicate sequencing of work that requires water, such as sprayed fire-resistive materials, plastering, and terrazzo grinding, and describe plans for dealing with water from these operations. Show procedures for verifying that wet construction has dried sufficiently to permit installation of finish materials.
- c. Indicate methods to be used to avoid trapping water in finished work.

### Quality Assurance

13. Electric Service: Comply with NECA, NEMA, and UL standards and regulations for temporary electric service. Install service to comply with NFPA 70.
14. Tests and Inspections: Arrange for authorities having jurisdiction to test and inspect each temporary utility before use. Obtain required certifications and permits.

### Project Conditions

15. Temporary Use of Permanent Facilities: Engage Installer of each permanent service to assume responsibility for operation, maintenance, and protection of each permanent service during its use as a construction facility before Owner's acceptance, regardless of previously assigned responsibilities.


## PRODUCTS

### Materials

16. Chain-Link Fencing: Minimum 2-inch, 0.148-inch-thick, galvanized-steel, chain-link fabric fencing; minimum 6 feet high with galvanized-steel pipe posts; minimum 2-3/8-inch-OD line posts and 2-7/8-inch-OD corner and pull posts, with 1-5/8-inch- (42-mm-) OD top rails.
17. Portable Chain-Link Fencing: Minimum 2-inch, 0.148-inch-thick, galvanized-steel, chain-link fabric fencing; minimum 6 feet high with galvanized-steel pipe posts; minimum 2-3/8-inch-OD line posts and 2-7/8-inch-OD corner and pull posts, with 1-5/8-inch-OD top and bottom rails. Provide galvanized-steel bases for supporting posts.
18. Fencing Windscreen Privacy Screen: Polyester fabric scrim with grommets for attachment to chain-link fence, sized to height of fence, in color selected by Yale.
19. Polyethylene Sheet: Reinforced, fire-resistive sheet, 10-mil minimum thickness, with flame-spread rating of 15 or less in accordance with ASTM E84 and passing NFPA 701 Test Method 2.
20. Insulation: Unfaced mineral-fiber blanket, manufactured from glass, slag wool, or rock wool; with maximum flame-spread and smoke-developed indexes of 25 and 50, respectively.

### Temporary Facilities

21. Field Offices:
  - a. Prefabricated or mobile units with serviceable finishes, temperature controls, and foundations adequate for normal loading.
  - b. Temporary facilities provided by the Owner tailored to Construction Manager's field office with serviceable finishes, temperature controls, etc...
  - c. Contractor shall be responsible for separate permit for any required regulatory inspections.

	Title: YALE OFFICE OF FACILITIES PROCEDURE MANUAL Chapter: 01 – Temporary Facilities & Controls Division: 01 50 00 Standards	Section: 01 50 00 Requirements for Division 1
		Date: July 2025
		Author: Program Support & Technical Services

22. Common-Use Field Office: Of sufficient size to accommodate needs of Owner, Architect, Construction Manager, and construction personnel office activities and to accommodate Project meetings specified in other Division 01 Sections. Keep office clean and orderly. Furnish and equip offices as follows:
  - a. Furniture required for Project-site documents, including file cabinets, plan tables, plan racks, and bookcases.
  - b. Conference room of sufficient size to accommodate meetings of 12 individuals. Provide electrical power service and 120-V ac duplex receptacles, with no fewer than one duplex receptacle on each wall and eight receptacles on conference table. Furnish room with conference table, chairs, and 4-foot-square tack, marker boards, 85" video display, 4K video camera, noise suppressing conference mic system, and WiFi access point with bandwidth for minimum 20 devices.
  - c. Drinking water and private toilet.
  - d. Heating and cooling equipment necessary to maintain a uniform indoor temperature of 68 to 72 deg F.
  - e. Lighting fixtures capable of maintaining average illumination of 20 fc at desk height.
23. Storage and Fabrication Sheds: Provide sheds sized, furnished, and equipped to accommodate materials and equipment for construction operations.
  - a. Store combustible materials apart from building.
  - b. All storage or fabrication sheds shall be approved and located by Yale if outside the project construction limits.


## Equipment

24. Fire Extinguishers: Portable, UL rated; with class and extinguishing agent as required by locations and classes of fire exposures.
25. HVAC Equipment: Unless Owner authorizes use of permanent HVAC system, provide vented, self-contained, liquid-propane-gas or fuel-oil heaters with individual space thermostatic control.
  - a. Use of gasoline-burning space heaters, open-flame heaters, or salamander-type heating units is prohibited.
  - b. Heating, Cooling, and Dehumidifying Units: Listed and labeled for type of fuel being consumed, by a qualified testing agency acceptable to authorities having jurisdiction, and marked for intended location and application.
  - c. Permanent HVAC System: If Owner authorizes use of permanent HVAC system for temporary use during construction, provide filter with MERV of 8 at each return-air grille in system and remove and replace at Substantial Completion and clean HVAC system as required in Section 017700 "Closeout Procedures."

## EXECUTION

### Temporary Facilities, General

26. Conservation: Coordinate construction and use of temporary facilities with consideration given to conservation of energy, water, and materials. Coordinate use of temporary utilities to minimize waste.

	Title: YALE OFFICE OF FACILITIES PROCEDURE MANUAL Chapter: 01 – Temporary Facilities & Controls Division: 01 50 00 Standards	Section: 01 50 00 Requirements for Division 1
		Date: July 2025
		Author: Program Support & Technical Services


- a. Salvage materials and equipment involved in performance of, but not actually incorporated into, the Work. See other Sections for disposition of salvaged materials that are designated as Owner's property.

### Installation, General

27. Locate facilities where they will serve Project adequately and result in minimum interference with performance of the Work. Relocate and modify facilities as required by progress of the Work.
  - a. Locate facilities to limit site disturbance as specified in Section 011000 "Summary."
  - b. Receive approval from Yale for any facilities located outside the project construction limits.
28. Provide each facility ready for use when needed to avoid delay. Do not remove until facilities are no longer needed or are replaced by authorized use of completed permanent facilities. All Facilities must be removed prior to Substantial Completion.
29. Isolation of Work Areas in Occupied Facilities: Prevent dust, fumes, and odors from entering occupied areas.
  - a. Prior to commencing work, isolate the HVAC system in area where work is to be performed.
    - 1) Disconnect supply and return ductwork in work area from HVAC systems servicing occupied areas.
    - 2) Maintain negative air pressure within work area, using HEPA-equipped air-filtration units, starting with commencement of temporary partition construction, and continuing until removal of temporary partitions is complete.
  - b. Maintain dust partitions during the Work. Use vacuum collection attachments on dust-producing equipment. Isolate limited work within occupied areas using portable dust-containment devices.
  - c. Maintain Dust control on the project for any disturbed work so that no dust shall migrate from the construction limits.
  - d. Perform daily construction cleanup and final cleanup using approved, HEPA-filter-equipped vacuum equipment.

### Temporary Utility Installation


30. General: Install temporary service or connect to existing service.
  - a. Arrange with utility company, Owner (minimum 2 week notice), and existing users for time when service can be interrupted, if necessary, to make connections for temporary services.
31. Sewers and Drainage: Provide temporary utilities to remove effluent lawfully.
  - a. Connect temporary sewers to municipal system as directed by authorities having jurisdiction.
32. Water Service:
  - a. Install water service and distribution piping in sizes and pressures adequate for construction.
33. Sanitary Facilities: Provide temporary toilets, wash facilities, safety shower and eyewash facilities, and drinking water for use of construction personnel. Comply with requirements of authorities having jurisdiction for type, number, location, operation, and maintenance of fixtures and facilities.
  - a. Use of Permanent Toilets: Use of Owner's existing or new toilet facilities is not permitted.
34. Temporary Heating and Cooling: Provide temporary heating and cooling required by construction activities for curing or drying of completed installations or for protecting installed construction from adverse effects of low temperatures or high humidity. Select equipment that will not have a harmful effect on completed installations or elements being installed.

	Title: YALE OFFICE OF FACILITIES PROCEDURE MANUAL Chapter: 01 – Temporary Facilities & Controls Division: 01 50 00 Standards	Section: 01 50 00 Requirements for Division 1
		Date: July 2025
		Author: Program Support & Technical Services

- a. Provide temporary dehumidification systems when required to reduce ambient and substrate moisture levels to level required to allow installation or application of finishes and their proper curing or drying.
- 35. Electric Power Service:
  - a. Provide electric power service and distribution system of sufficient size, capacity, and power characteristics required for construction operations.
    - 1) Install electric power service overhead unless otherwise indicated.
- 36. Lighting: Provide temporary lighting with local switching that provides adequate illumination for construction operations, observations, inspections, and traffic conditions.
  - a. Install and operate temporary lighting that fulfills security and protection requirements without operating entire system.
- 37. Telephone Service: Provide temporary telephone service in common-use facilities for use by all construction personnel. Install one land-based telephone line(s) for each field office.
  - a. At each telephone, post a list of important telephone numbers.
    - 1) Police and fire departments.
    - 2) Ambulance service.
    - 3) Construction Manager's home office.
    - 4) Construction Manager's emergency after-hours telephone number.
    - 5) Architect's office.
    - 6) Engineers' offices.
    - 7) Owner's office.
    - 8) Principal subcontractors' field and home offices.
- 38. Electronic Communication Service: Provide secure WiFi wireless connection to internet with provisions for access by Architect and Owner.

### Support Facilities Installation


- 39. Comply with the following:
  - a. Provide construction for temporary field offices, shops, and sheds located within 30 feet of building lines that is noncombustible in accordance with ASTM E136. Comply with NFPA 241.
  - b. Maintain support facilities until Owner accepts Substantial Completion. Remove before Substantial Completion. Personnel remaining after Substantial Completion will be permitted to use permanent facilities, under conditions acceptable to Owner.
- 40. Temporary Roads and Paved Areas: Construct and maintain temporary roads and paved areas adequate for construction operations. Locate temporary roads and paved areas within construction limits.
  - a. Provide dust-control treatment that is nonpolluting and non-tracking. Reapply treatment as required to minimize dust.
- 41. Traffic Management Plan. The Construction Manager will prepare, subject to approval by the Owner and Governmental Authorities, a Project-specific engineered traffic management plan depicting street lane closures and diversions, parking meter bagging, sidewalk closures and diversions, site access and egress, temporary pavement markings, barricades, fences, and warning and directional signage required during construction.
  - a. Protect existing site improvements to remain, including curbs, pavement, and utilities.

	Title: YALE OFFICE OF FACILITIES PROCEDURE MANUAL Chapter: 01 – Temporary Facilities & Controls Division: 01 50 00 Standards	Section: 01 50 00 Requirements for Division 1
		Date: July 2025
		Author: Program Support & Technical Services


- b. Maintain access for fire-fighting equipment and access to fire hydrants.
- 42. Parking: Construction Manager will coordinate with the Owner’s parking policies, and subject to approval by the Owner and Governmental Authorities. A Project-specific parking plan for utilization of available off-site parking during construction will be provided by the Owner.
- 43. Storage and Staging: Provide temporary offsite area for storage and staging needs.
- 44. Dewatering Facilities and Drains: Comply with requirements of authorities having jurisdiction. Maintain Project site, excavations, and construction free of water.
  - a. Dispose of rainwater in a lawful manner that will not result in flooding Project or adjoining properties or endanger permanent Work or temporary facilities.
  - b. Remove snow and ice as required to minimize accumulations.
- 45. Project Signs: Provide Project signs as indicated and Approved by Yale. Unauthorized signs are not permitted.
  - a. Identification Signs: Provide Project identification signs as indicated on Drawings. Sign graphics and text to be approved by Owner.
  - b. Temporary Signs: Provide other signs as indicated, approved by Yale and as required to inform public and individuals seeking entrance to Project.
    - 1) Provide temporary, directional signs for construction personnel and visitors.
  - c. Maintain and touch up signs, so they are legible at all times.
- 46. Waste Disposal Facilities:
  - a. Comply with requirements specified in Section 017419 "Construction Waste Management and Disposal."
- 47. Lifts and Hoists: Provide facilities necessary for hoisting materials and personnel.
- 48. Temporary Elevator Use: See Division 14 elevator Section for temporary use of new elevators.
- 49. Temporary Stairs: Until permanent stairs are available, provide temporary stairs where ladders are not adequate.
- 50. Temporary Use of Permanent Stairs: Use of new stairs for construction traffic will be permitted, provided stairs are protected and finishes restored to new condition at time of Substantial Completion.

### **Security and Protection Facilities Installation**

- 51. Protection of Existing Facilities: Protect existing vegetation, equipment, structures, utilities, and other improvements on adjacent properties, except those indicated to be removed or altered. Repair damage to existing facilities.
  - a. Where access to adjacent properties is required in order to affect protection of existing facilities, obtain written permission from adjacent property owner to access property for that purpose.
- 52. Environmental Protection: Provide protection, operate temporary facilities, and conduct construction as required to comply with environmental regulations and that minimize possible air, waterway, and subsoil contamination or pollution or other undesirable effects.
  - a. Comply with work restrictions specified in Section 011000 "Summary."
- 53. Temporary Erosion and Sedimentation Control:
  - a. Comply with requirements specified in Section 31 25 00 "Erosion and Sediment Control."

	Title: YALE OFFICE OF FACILITIES PROCEDURE MANUAL Chapter: 01 – Temporary Facilities & Controls Division: 01 50 00 Standards	Section: 01 50 00 Requirements for Division 1
		Date: July 2025
		Author: Program Support & Technical Services


54. Stormwater Control: Comply with requirements of authorities having jurisdiction. Provide barriers in and around excavations and subgrade construction to prevent flooding by runoff of stormwater from heavy rains.
55. Tree and Plant Protection:
  - a. Install temporary fencing located as indicated or outside the drip line of trees to protect vegetation from damage from construction operations. Protect tree root systems from damage, flooding, and erosion.
56. Pest Control: Engage pest-control service to recommend practices to minimize attraction and harboring of rodents, roaches, and other pests and to perform extermination and control procedures at regular intervals, so Project will be free of pests and their residues at Substantial Completion. Perform control operations lawfully, using materials approved by authorities having jurisdiction. Submit Pest Control Plan prior to the commencement of construction.
57. Site Enclosure Fence: Before construction operations begin, furnish and install site enclosure fence in a manner that will prevent people from easily entering site except by entrance gates.
  - a. Extent of Fence: Location and extent as indicated in Construction Manager's approved Site Logistics Plan.
  - b. Maintain security by limiting number of keys and restricting distribution to authorized personnel.
58. Security Enclosure and Lockup: Install temporary enclosure around partially completed areas of construction. Provide lockable entrances to prevent unauthorized entrance, vandalism, theft, and similar violations of security. Lock entrances at end of each workday.
59. Barricades, Warning Signs, and Lights: Comply with requirements of authorities having jurisdiction for erecting structurally adequate barricades, including warning signs and lighting.
60. Temporary Egress: Provide temporary egress from existing occupied facilities as indicated and as required by authorities having jurisdiction. Provide signage directing occupants to temporary egress.
61. Covered Walkway: Where required as part of Construction Manager's approved Site Logistics Plan, erect protective, covered walkway designed by a Professional Engineer licensed in the State of Connecticut for passage of individuals through or adjacent to Project site. Coordinate with entrance gates, other facilities, and obstructions. Comply with regulations of authorities having jurisdiction.
  - a. Provide overhead decking, protective enclosure walls, handrails, barricades, warning signs, exit signs, lights, safe and well-drained walkways, and similar provisions for protection and safe passage.
  - b. Paint and maintain appearance of walkway for duration of the Work.
62. Temporary Partitions: Provide floor-to-ceiling dustproof partitions to limit dust and dirt migration and to separate areas occupied by Owner from fumes and noise.
  - a. Construct dustproof partitions with gypsum wallboard, with joints taped on occupied side, and fire-retardant-treated plywood on construction operations side.
  - b. Construct dustproof partitions with two layers of 6-mil polyethylene sheet on each side. Cover floor with two layers of 6-mil polyethylene sheet, extending sheets 18 inches up the sidewalls. Overlap and tape full length of joints. Cover floor with fire-retardant-treated plywood.
    - 1) Construct vestibule and airlock at each entrance through temporary partition with not less than 48 inches between doors. Maintain water-dampened foot mats in vestibule.

	Title: YALE OFFICE OF FACILITIES PROCEDURE MANUAL Chapter: 01 – Temporary Facilities & Controls Division: 01 50 00 Standards	Section: 01 50 00 Requirements for Division 1
		Date: July 2025
		Author: Program Support & Technical Services

- c. Where fire-resistance-rated temporary partitions are indicated or are required by authorities having jurisdiction, construct partitions according to the rated assemblies.
- d. Insulate partitions to control noise transmission to occupied areas.
- e. Seal joints and perimeter. Equip partitions with gasketed dustproof doors and security locks where openings are required.
- f. Protect air-handling equipment.
- g. Provide walk-off mats at each entrance through temporary partition.
- 63. Temporary Enclosures: Provide temporary enclosures for protection of construction, in progress and completed, from exposure, foul weather, other construction operations, and similar activities. Provide temporary weathertight enclosure for building exterior.
  - a. Where heating or cooling is needed and permanent enclosure is incomplete, insulate temporary enclosures.
- 64. Temporary Fire Protection: Install and maintain temporary fire-protection facilities of types needed to protect against reasonably predictable and controllable fire losses. Comply with NFPA 241 and approval of the Yale Fire Marshal; manage fire-prevention program.
  - a. Prohibit smoking in construction areas and on adjacent properties or the public way. Comply with additional limits on smoking specified in other Sections.
  - b. Supervise welding operations, combustion-type temporary heating units, and similar sources of fire ignition in accordance with requirements of authorities having jurisdiction.
  - c. Develop and supervise an overall fire-prevention and -protection program for personnel at Project site. Review needs with local fire department and establish procedures to be followed. Instruct personnel in methods and procedures. Post warnings and information.
  - d. Provide temporary standpipes and hoses for fire protection as required by the Authority having Jurisdiction and the Yale Fire marshal. Hang hoses with a warning sign, stating that hoses are for fire-protection purposes only and are not to be removed. Match hose size with outlet size and equip with suitable nozzles.

### Moisture and Mold Control


- 65. Moisture and Mold Protection: Protect stored materials and installed Work in accordance with Moisture and Mold Protection Plan.
- 66. Exposed Construction Period: Before installation of weather barriers, when materials are subject to wetting and exposure and to airborne mold spores, protect as follows:
  - a. Protect porous materials from water damage.
  - b. Protect stored and installed material from flowing or standing water.
  - c. Keep porous and organic materials from coming into prolonged contact with concrete.
  - d. Remove standing water from decks.
  - e. Keep deck openings covered or dammed.
- 67. Partially Enclosed Construction Period: After installation of weather barriers but before full enclosure and conditioning of building, when installed materials are still subject to infiltration of moisture and ambient mold spores, protect as follows:
  - a. Do not load or install drywall or other porous materials or components, or items with high organic content, into partially enclosed building.
  - b. Keep interior spaces reasonably clean and protected from water damage.
  - c. Periodically collect and remove waste containing cellulose or other organic matter.

	Title: YALE OFFICE OF FACILITIES PROCEDURE MANUAL Chapter: 01 – Temporary Facilities & Controls Division: 01 50 00 Standards	Section: 01 50 00 Requirements for Division 1
		Date: July 2025
		Author: Program Support & Technical Services

- d. Discard or replace water-damaged material.
  - e. Do not install material that is wet.
  - f. Discard and replace stored or installed material that begins to grow mold.
  - g. Perform work in a sequence that allows wet materials adequate time to dry before enclosing the material in gypsum board or other interior finishes.
68. Controlled Construction Period: After completing and sealing of the building enclosure but prior to the full operation of permanent HVAC systems, maintain as follows:
- a. Control moisture and humidity inside building by maintaining effective dry-in conditions.
  - b. Use temporary or permanent HVAC system to control humidity within ranges specified for installed and stored materials.
  - c. Comply with manufacturer's written instructions for temperature, relative humidity, and exposure to water limits.
    - 1) Hygroscopic materials that may support mold growth, including wood and gypsum-based products, that become wet during the course of construction and remain wet for 48 hours are considered defective and require replacing.
    - 2) Measure moisture content of materials that have been exposed to moisture during construction operations or after installation. Record readings beginning at time of exposure and continuing daily for 96 hours. Identify materials containing moisture levels higher than allowed. Report findings in writing to Architect.
    - 3) Remove and replace materials that cannot be completely restored to their manufactured moisture level within 48 hours.

### Operation, Termination, and Removal

- 69. Supervision: Enforce strict discipline in use of temporary facilities. To minimize waste and abuse, limit availability of temporary facilities to essential and intended uses.
- 70. Maintenance: Maintain facilities in good operating condition until removal.
  - a. Maintain operation of temporary enclosures, heating, cooling, humidity control, ventilation, and similar facilities on a 24-hour basis where required to achieve indicated results and to avoid possibility of damage.
- 71. Temporary Facility Changeover: Do not change over from using temporary security and protection facilities to permanent facilities until Substantial Completion.
- 72. Termination and Removal: Remove each temporary facility when need for its service has ended, when it has been replaced by authorized use of a permanent facility, or no later than Substantial Completion. Complete or, if necessary, restore permanent construction that may have been delayed because of interference with temporary facility. Repair damaged Work, clean exposed surfaces, and replace construction that cannot be satisfactorily repaired.
  - a. Materials and facilities that constitute temporary facilities are property of Contractor. Owner reserves right to take possession of Project identification signs.
  - b. Where area is intended for landscape development, remove soil and aggregate fill that do not comply with requirements for fill or subsoil. Remove materials contaminated with road oil, asphalt and other petrochemical compounds, and other substances that might impair growth of plant materials or lawns. Repair or replace street paving, curbs, and sidewalks at temporary entrances, as required by authorities having jurisdiction.

	<b>Title: YALE OFFICE OF FACILITIES PROCEDURE MANUAL</b> Chapter: 01 – Temporary Facilities & Controls Division:01 50 00 Standards	<b>Section: 01 50 00</b> Requirements for Division 1
		Date: July 2025
		Author: Program Support & Technical Services

- c. At Substantial Completion, repair, renovate, and clean permanent facilities used during construction period. Comply with final cleaning requirements specified in Section 017700 "Closeout Procedures."