

Modular Field Offices for **DOT Projects**



Mhy This Guide?

We know what it's like bidding on highway construction projects. Bureaucratic red tape can be hard to cut throughespecially when you've been searching for hours and can't find any of the necessary information. Some states may have very specific and strict specifications, while others have none at all.

Instead of scouring the internet or spending hours on the phone, we've compiled everything you need to know about field office requirements for Department of Transportation (DOT) projects -all in one place.

We've covered the DOT requirements for eleven states:

- Connecticut
- Maine
- Massachusetts
- New Hampshire
- Ohio
- Pennsylvania
- Rhode Island
- Vermont
- West Virginia
- New Jersey
- Delaware

We've also included some thoughts on how Triumph Modular can help furnish your field offices and save you some time. However, this guide is meant to be educational above all else. Triumph Modular can provide you with some of the furnishings necessary to meet DOT requirements, but others, such as computers, will need to be acquired independently.

For more information, contact your local rep.











Table of Contents

Connecticut	4
Basic Information	4
Layouts	
Specifications	8
Maine	17
Summary	
Layouts	18
Specifications	20
Massachusetts	
Summary	25
Layouts	26
Specifications	27
New Hampshire	
Summary	33
Layouts	34
Specifications	37
Ohio	
Summary	
Layouts	
Specifications	46
Pennsylvania	49
Summary	
Layouts	
Specifications	53
Rhode Island	59
Summary	59
Layouts	60
Specifications	61
Vermont	68
Summary	
Layouts	69
Specifications	70
West Virginia	74
Summary	74
Layouts	75



Table of Contents

New Jersey	76
Basic Information	76
Layouts	77
Specifications	82
Delaware	90
Summary	90
Layouts	91
Other Considerations	92
Next Steps	93



Connecticut

Basic Information

Summary

While other states choose to separate different types of field offices using type names (type A, type B, etc.), Connecticut instead simply calls them out by sizing, with four different sizes of DOT trailers.

The state of Connecticut has a *lot* of things to take into consideration with DOT projects. We'll have them covered here, but you can also find everything you need on the Connecticut Department of Transportation <u>Website</u>.

Contact form for CTDOT: <u>Form link</u>

CTDOT Customer Care Center Number: (860) 594-2560

Email: DOT.CustomerCare@ct.gov

Mailing Address:

Connecticut Department of Transportation 2800 Berlin Turnpike P.O. Box 317546 Newington, CT 06131-7546



Layouts

Connecticut uses four different layouts for field offices—all with a minimum ceiling height of seven feet.

Unless otherwise approved by the engineer, office space shall be partitioned into segregated work areas for each user as follows:

- Each work area (or cubicle) shall be a minimum of 8 feet × 8 feet, with full-height walls or tall cubicle partitions (minimum 6 feet high), placed to provide a minimum of 6 feet walking space around and between each user work area.

Walking space around and between each user work area (for social distancing)

- Only one user (workstation/desk) per work area
- Desks, tables, and other work surfaces shall be arranged so that adjacent users do not face each other

Small

Connecticut's "small" field office designation has a minimum square footage of 400. It has no less than two exterior entrances and seven parking spaces.







Connecticut

SUR

PIOL

Layouts

Medium

Connecticut's "medium" field office designation has a minimum square footage of 720. It has no less than two exterior entrances and seven parking spaces.



12' x 64' field office

Large

Connecticut's "large" field office designation has a minimum square footage of 1400. It has no less than two exterior entrances and ten parking spaces.

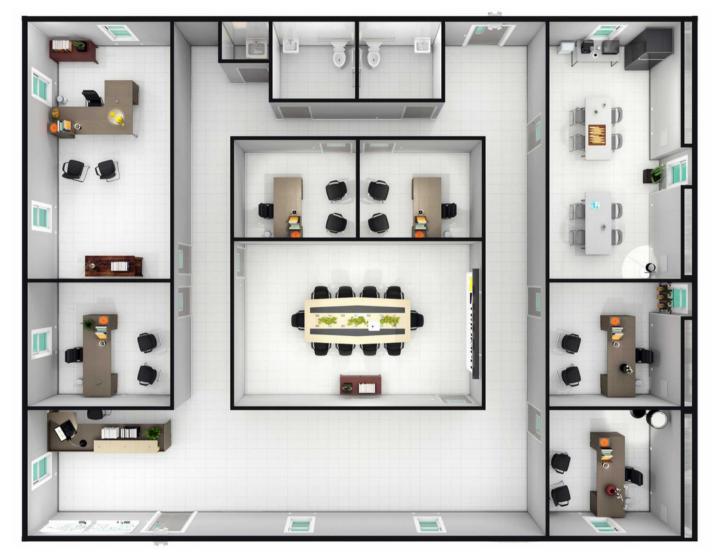






Extra Large

Connecticut's "extra large" field office designation has a minimum square footage of 2800. It has no less than two exterior entrances and 15 parking spaces.



64' x 64' temporary building





Note: This section is a reproduction of the current CTDOT requirements for field offices. For more information, consult the Connecticut Department of Transportation Website.

Rev. Date 11/16/2020

ITEM #0969064A - CONSTRUCTION FIELD OFFICE, LARGE

Description: Under the item included in the bid document, adequate weatherproof office quarters with related furnishings, materials, equipment and other services, shall be provided by the Contractor for the duration of the work, and if necessary, for a close-out period determined by the Engineer. The office, furnishings, materials, equipment, and services are for the exclusive use of CTDOT forces and others who may be engaged to augment CTDOT forces with relation to the Contract. The office quarters shall be located convenient to the work site and installed in accordance with Article 1.08.02. This office shall be separated from any office occupied by the Contractor. Ownership and liability of the office quarters shall remain with the Contractor.

Furnishings/Materials/Supplies/Equipment: All furnishings, materials, equipment and supplies shall be in like new condition for the purpose intended and require approval of the Engineer.

Office Requirements: The Contractor shall furnish the office quarters and equipment as described below:

Description \ Office Size	Small	Med.	Large	Extra Large
Minimum Sq. Ft. of floor space with a minimum ceiling height of 7 ft.	400	720	1400	2800
Minimum number of exterior entrances.	2	2	2	2
Minimum number of parking spaces.	7	7	10	15

<u>Office Layout:</u> The office shall have a minimum square footage as indicated in the table above and shall be partitioned as shown on the building floor plan as provided by the Engineer.

Unless otherwise approved by the Engineer, office space shall be partitioned into segregated work areas for each user as follows:

- Each work area (or cubicle) shall be a minimum of 8 feet × 8 feet, with full height walls or tall cubicle partitions (minimum 6 feet high), placed to provide a minimum of 6 feet walking space around and between each user work area (for social distancing).
- Only one user (workstation/desk) per work area.
- Desks, tables and other work surfaces shall be arranged so that adjacent users do not face each other.

Tie-downs and Skirting: Modular offices shall be tied-down and fully skirted to ground level.

Lavatory Facilities: For field offices sizes Small and Medium the Contractor shall furnish a toilet facility at a location convenient to the field office for use by CTDOT personnel and such assistants as they may engage; and for field offices sizes Large and Extra Large the Contractor shall furnish two (2) separate lavatories with toilet (men and women), in separately enclosed rooms that are properly ventilated and comply with applicable sanitary codes. Each lavatory shall have hot and cold running water and flush-type toilets. For all facilities the Contractor shall supply lavatory and sanitary supplies as required.

42-324

180



Rev. Date 11/16/2020

<u>Windows and Entrances</u>: The windows shall be of a type that will open and close conveniently, shall be sufficient in number and size to provide adequate light and ventilation, and shall be fitted with locking devices, blinds and screens. The entrances shall be secure, screened, and fitted with a lock for which four keys shall be furnished. All keys to the construction field office shall be furnished to the CTDOT and will be kept in their possession while State personnel are using the office. Any access to the entrance ways shall meet applicable building codes, with appropriate handrails. Stairways shall be ADA/ABA compliant and have non-skid tread surfaces. An ADA/ABA compliant ramp with non-skid surface shall be provided with the Extra-Large field office.

<u>Lighting</u>: The Contractor shall equip the office interior with electric lighting that provides a minimum illumination level of 100 foot-candles at desk level height, and electric outlets for each desk and drafting table. The Contractor shall also provide exterior lighting that provides a minimum illumination level of 2 foot-candles throughout the parking area and for a minimum distance of 10 ft. on each side of the field office.

<u>Parking Facility</u>: The Contractor shall provide a parking area, adjacent to the field office, of sufficient size to accommodate the number of vehicles indicated in the table above. If a paved parking area is not readily available, the Contractor shall construct a parking area and driveway consisting of a minimum of 6 inches of processed aggregate base graded to drain. The base material will be extended to the office entrance.

<u>Field Office Security:</u> Physical Barrier Devices - This shall consist of physical means to prevent entry, such as: 1) All windows shall be barred or security screens installed; 2) All field office doors shall be equipped with dead bolt locks and regular day operated door locks; and 3) Other devices as directed by the Engineer to suit existing conditions.

<u>Electric Service</u>: The field office shall be equipped with an electric service panel, wiring, outlets, etc., to serve the electrical requirements of the field office, including: lighting, general outlets, computer outlets, electronics, etc., and meet the following minimum specifications:

- A. 120/240 volt, 1 phase, 3 wire
- B. Ampacity necessary to serve all equipment. Service shall be a minimum 100 amp dedicated to the construction field office.
- C. The electrical panel shall include a main circuit breaker and branch circuit breakers of the size and quantity required.
- D. Additional 120 volt, single phase, 20 amp, isolated ground dedicated power circuit with dual NEMA 5-20 receptacles will be installed at each desk and personal computer table (workstation) location.
- E. Additional 120 volt, single phase, 20 amp, isolated ground dedicated power circuit with dual NEMA 5-20 receptacles will be installed, for use by the Telephone Company.
- F. Additional 120-volt circuits and duplex outlets as required meeting National Electric Code requirements.
- G. One exterior (outside) wall mounted GFI receptacle, duplex, isolated ground, 120 volt, straight blade.

42-324

181



Rev. Date 11/16/2020

- H. After work is complete and prior to energizing, the State's CTDOT electrical inspector, must be contacted at 860-594-2240. (Do Not Call Local Town Officials)
- I. Prior to field office removal, the CTDOT Office of Information Systems (CTDOT OIS) must be notified to deactivate the communications equipment.

<u>Heating</u>, <u>Ventilation and Air Conditioning (HVAC)</u>: The field office shall be equipped with sufficient and properly operating, heating, air conditioning, and ventilation equipment to maintain a temperature range of 68°-80° Fahrenheit within the field office. The Contractor shall increase ventilation rates and increase the percentage of outdoor air that circulates into the system where possible.

<u>Telephone Service</u>: The Contractor shall provide telephone service with unlimited nation-wide calling plan. For a Small, Medium and Large field office this shall consist of the installation of two (2) telephone lines: one (1) line for phone/voice service and one (1) line dedicated for the facsimile machine. For an Extra-Large field office this shall consist of four (4) telephone lines: three (3) lines for phone/voice service and one (1) line dedicated for facsimile machine. The Contractor shall pay all charges.

Data Communications Facility Wiring: Contractor shall install a Category 6 568B patch panel in a central wiring location and Cat 6 cable from the patch panel to each PC station, Smart Board location, Multifunction Laser Printer/Copier/Scanner/Fax, terminating in a (Category 6 568B) wall or surface mount data jack. The central wiring location shall also house either the data circuit with appropriate power requirements or a Category 6 cable run to the location of the installed data circuit. The central wiring location will be determined by the CTDOT OIS staff in coordination with the designated field office personnel as soon as the facility is in place.

For Small, Medium and Large field offices the Contractor shall run a CAT 6 LAN cable a minimum length of 25 feet for each CTDOT networked device (including but not limited to: smartboards and Multi-Function Laser Printer/Copier/Scanner/Fax) to LAN switch area leaving an additional 10 feet of cable length on each side with terminated RJ45 connectors. For an Extra-Large field office, the Contractor shall run CAT 6 LAN cables from workstations, install patch panel in data circuit demark area and terminate runs with RJ45 jacks at each device location. Terminate runs to patch panel in LAN switch area. Each run / jack shall be clearly labeled with an identifying Jack Number.

The Contractor shall supply cables to connect the Wi-Fi printer to the Contractor supplied internet router and to workstations/devices as needed. These cables shall be separate from the LAN cables and data Jacks detailed above for the CTDOT network.

The number of networked devices anticipated shall be at least equal to the number of personal computer tables, Multi-Function Laser Printer/Copier/Scanner/Fax, and smartboards listed below.

The installation of a data communication circuit between the field office and the CTDOT OIS in Newington will be coordinated between the CTDOT District staff, CTDOT OIS staff and the local utility company once the Contractor supplies the field office phone numbers and anticipated installation date. The Contractor shall provide the field office telephone number(s) to the CTDOT

42-324

182

10



Rev. Date 11/16/2020

Project Engineer within 10 calendar days after the signing of the Contract as required by Article 1.08.02. This is required to facilitate data line and computer installations.

Additional Equipment, Facilities and Services: The Contractor shall provide at the field Office at least the following to the satisfaction of the Engineer:

		Office Size			
Furnishing Description	Small	Med.	Large	Extra Large	
		Qua	ntity		
Office desk (2.5 ft. x 5 ft.) with drawers, locks, and matching desk chair that have pneumatic seat height adjustment and dual wheel casters on the base.	1	3	5	8	
Standard secretarial type desk and matching desk chair that has pneumatic seat height adjustment and dual wheel casters on the base.	-	-	-	1	
Personal computer tables (4 ft. x 2.5 ft.).	2	3	5	8	
Drafting type tables (3 ft. x 6 ft.) and supported by wall brackets and legs; and matching drafter's stool that have pneumatic seat height adjustment, seat back and dual wheel casters on the base.	1	1	1	2	
Conference table, 3 ft. x 12 ft.	-	-	-	1	
Table – 3 ft. x 6 ft.			-	1	
Office Chairs.	2	4	8	20	
Mail slot bin – legal size.	-	-	1	1	
Non-fire-resistant cabinet.	-	-	2	4	
Fire resistant cabinet (legal size/4 drawer), locking.	1	1	2	3	
Storage racks to hold 3 ft. x 5 ft. display charts.	-	-	1	2	
Vertical plan racks for 2 sets of 2 ft. x 3 ft. plans for each rack.	1	1	2	2	
Double door supply cabinet with 4 shelves and a lock – 6 ft. x 4 ft.	2	-	1	2	
Case of cardboard banker boxes (Min 10 boxes/case)	1	1	2	3	
Open bookcase – 3 shelves – 3 ft. long.	-	-	2	2	
White Dry-Erase Board, 36" x 48" min. with markers and eraser.	1	1	1	1	
Interior partitions – 6 ft. x 6 ft., soundproof type, portable and freestanding.	-	-	6	6	
Coat rack with 20 coat capacity.	-	-	-	1	
Wastebaskets - 30 gal., including plastic waste bags.	1	1	1	2	
Wastebaskets - 5 gal., including plastic waste bags.	1	3	6	10	
Electric wall clock.	-	-	-	2	
Electronic Level	1	1	1	2	

42-324

ITEM #0969064A



183

Rev. Date 11/16/2020

		Office Size			
Furnishing Description	Small	Med.	Large	Extra	
		Qua	intity		
Telephone.	1	2	3	-	
Full size stapler 20 (sheet capacity, with staples)	1	2	5	8	
Desktop tape dispensers (with Tape)	1	2	5	8	
8 Outlet Power Strip with Surge Protection	3	4	6	9	
Rain Gauge	1	1	1	1	
Business telephone system for three lines with ten handsets, intercom capability, and one speaker phone for conference table.	-	-	-	1	
Mini refrigerator - 3.2 c.f. min.	1	1	1	1	
Hot and cold-water dispensing unit. Disposable cups and bottled water shall be supplied by the Contractor for the duration of the project.	1	1	1	1	
Microwave, 1.2 c.f. , 1000W min.	1	1	1	1	
Fire extinguishers - provide and install type and *number to meet applicable State and local codes for size of office indicated, including a fire extinguisher suitable for use on a computer terminal fire.	*	•		*	
Electric pencil sharpeners.	1	2	2	2	
Electronic office type printing calculators capable of addition, subtraction, multiplication and division with memory and a supply of printing paper.	1	1	2	4	
Small Multi-Function Laser Printer/Copier/Scanner/Fax combination unit, network capable, as specified below under Computer Related Hardware and Software.	1	1			
Large Multi-Function Laser Printer/Copier/Scanner/Fax combination unit, network capable, as specified below under <u>Computer Related Hardware and Software</u> .			1	1	
Field Office Wi-Fi Connection as specified below under Computer Related Hardware and Software	1	1	1	1	
Wi-Fi Printer as specified below under Computer Related Hardware and Software.	1	1	1	1	
Digital Camera as specified below under Computer Related Hardware and Software.	1	1	3	3	
Video Projector as specified below under Computer Related Hardware and Software.	-	-	-	1	
Smart Board as specified below under Computer Related Hardware and Software.	-	-	-	1	

184



Rev. Date 11/16/2020

Conference Room Presentation Television as specified below under Computer Related Hardware and Software.	-	-	-	-
Infrared Thermometer, including annual third-party certified calibration, case, and cleaning wipes.	1	1	1	2
Concrete Curing Box as specified below under Concrete Testing Equipment.	1	1	1	1
Concrete Air Meter and accessories as specified below under Concrete Testing Equipment as specified below. Contractor shall provide third party calibration on a quarterly basis.	1	1	1	1
Concrete Slump Cone and accessories as specified below under Concrete Testing Equipment.	1	1	1	1
First Aid Kit	1	1	1	1
Disinfecting wipes, sprays, and other supplies (** as specified below under Maintenance).	**	**	**	**
Hand sanitizer stations (*** maintain one full station at each entrance, restroom, and conference area).	***	***	***	***
Flip Phones as specified under <u>Computer Related Hardware and</u> Software.	-		-	-
Smart Phones as specified under <u>Computer Related Hardware</u> and Software.	•	-	-	-

The furnishings and equipment required herein shall remain the property of the Contractor. Any supplies required to maintain or operate the above listed equipment or furnishings shall be provided by the Contractor for the duration of the project.

<u>Computer Related Hardware and Software:</u> The CTDOT will supply by its own means the actual Personal Computers for the CTDOT representatives. The Contractor shall supply the Field Office Wi-Fi Connection, Wi-Fi Printer, Digital Camera(s), Flip Phones, Smart Phones, Multifunction Laser Printer/Copier/Scanner/Fax, Video Projectors, and Smart Board(s), Conference Room Presentation Television, as well as associated hardware and software, meeting the requirements of this specification as well as the latest minimum specifications posted, as of the project advertising date, at CTDOTs web site http://www.ct.gov/dot/cwp/view.asp?a=1410&q=563904

Within 10 calendar days after the signing of the Contract but before ordering/purchasing the Wi-Fi Printer (separate from the Multifunction Laser Printer/Copier/Scanner/Fax), Field Office Wi-Fi, Digital Camera(s), Flip Phones, Smart Phones, Multifunction Laser Printer/Copier/Scanner/Fax, Video Projector(s) and Smart Board(s) as well as associated hardware, the Contractor must submit a copy of their proposed order(s) with catalog cuts and specifications to the Administering CTDOT District for review and approval. The Wi-Fi Printer, Wi-Fi Router, Flip Phones, Smart Phones, digital cameras, Projector(s) and Smart Board(s) will be reviewed by CTDOT District personnel. The Multifunction Laser Printer/Copier/Scanner/Fax will be reviewed by the CTDOT OIS. The Contractor shall not purchase the hardware, software, or services until the Administering CTDOT District informs them that the proposed equipment, software, and services are approved. The

42-324

13



Rev. Date 11/16/2020

Contractor will be solely responsible for the costs of any hardware, software, or services purchased without approval.

The Contractor and/or their internet service provider shall be responsible for the installation and setup of the field office Wi-Fi, Wi-Fi printer, and the configuration of the wireless router as directed by the CTDOT. Installation will be coordinated with CTDOT District and Project personnel.

After the approval of the hardware and software, the Contractor shall contact the designated representatives of the CTDOT administering District, a minimum of 2 working days in advance of the proposed delivery or installation of the Field Office Wi-Fi Connection, Wi-Fi Printer, Digital Camera(s), Flip Phones, Smart Phones, Multifunction Laser Printer/Copier/Scanner/Fax, Video Projectors and Smart Board(s), as well as associated hardware, software, supplies, and support documentation.

The Contractor shall provide all supplies, paper, maintenance, service and repairs (including labor and parts) for the Wi-Fi printers, copiers, field office Wi-Fi, fax machines and other equipment and facilities required by this specification for the duration of the Contract. All repairs must be performed with-in 48 hours. If the repairs require more than 48 hours, then an equal or better replacement must be provided.

Once the Contract has been completed, the hardware and software will remain the property of the Contractor.

<u>First Aid Kit:</u> The Contractor shall supply a first aid kit adequate for the number of personnel expected based on the size of the field office specified and shall keep the first aid kit stocked for the duration that the field office is in service.

Rain Gauge: The Contractor shall supply install and maintain a rain gauge for the duration of the project, meeting these minimum requirements. The rain gauge shall be installed on the top of a post such that the opening of the rain gauge is above the top of the post an adequate distance to avoid splashing of rainwater from the top of the post into the rain gauge. The location of the rain gauge and post shall be approved by the Engineer. The rain gauge shall be made of a durable material and have graduations of 0.1 inches or less with a minimum total column height of 5 inches. If the rain gauge is damaged the Contractor shall replace it prior to the next forecasted storm event at no additional cost.

<u>Electronic Level</u>: The Contractor shall supply and maintain in working order, for the duration of the Contract, the number of electronic levels, identified in the Additional Equipment, Facilities and Services table of this specification. The electronic levels shall meet the following requirements:

- A. 48-inch length, box beam type
- B. IP65 water and dust proof
- C. 0.1-degree accuracy
- D. Backlit display

42-324

186



Rev. Date 11/16/2020

- E. Carrying case included
- F. New or like new condition

<u>Concrete Testing Equipment:</u> If the Contract includes items that require compressive strength cylinders for concrete, in accordance with the Schedule of Minimum Testing Requirements for Sampling Materials for Test, the Contractor shall provide the following equipment.

- A. Concrete Cylinder Curing Box meeting the requirements of Section 6.12 of the Standard Specifications.
- B. Air Meter The air meter provided shall be in good working order and meet the requirements of AASHTO T 152.
- C. Slump Cone Mold Slump cone, base plate, and tamping rod shall be provided in like-new condition and meet the requirements of AASHTO T119, Standard Test Method for Slump of Hydraulic-Cement Concrete.

All testing equipment will remain the property of the Contractor at the completion of the project.

Insurance Policy: The Contractor shall provide a separate insurance policy, with no deductible, in the minimum amount of five thousand dollars (\$5,000) in order to insure all State-owned data equipment and supplies used in the office against all losses. The Contractor shall be named insured on that policy, and the CTDOT shall be an additional named insured on the policy. These losses shall include, but not be limited to theft, fire, and physical damage. The CTDOT will be responsible for all maintenance costs of CTDOT owned computer hardware. In the event of loss, the Contractor shall provide replacement equipment in accordance with current CTDOT equipment specifications, within seven days of notice of the loss. If the Contractor is unable to provide the required replacement equipment from monies due or which may become due the Contractor under the Contract or under any other contract. The Contractor's financial liability under this paragraph shall be limited to the amount of the insurance coverage required by this paragraph. If the cost of equipment replacement required by this paragraph should exceed the required amount of the required coverage.

<u>Maintenance</u>: During the occupancy by the CTDOT, the Contractor shall maintain all facilities and furnishings provided under the above requirements, and shall maintain and keep the office quarters clean through the use of professional cleaning including, but not limited to, vacuuming carpet, washing & waxing floors, cleaning restrooms, removal of trash, general cleaning, etc. The general cleaning of the office shall be at least twice weekly. Restrooms, portable toilets and all other high touch areas shall be cleaned and disinfected at least every two days using CDC and Department of Health recommended and non-hazardous techniques. High touch areas to be cleaned include but are not be limited to (depending on the facilities supplied):

A. Arms on chairs

42-324

187

15



Rev. Date 11/16/2020

- B. Table/Desktops
- C. Handrails
- D. Doorknobs and handles
- E. Countertops
- F. Elevator buttons
- G. Coffee pots
- H. Refrigerator / microwave / dishwasher / toaster handles
- I. Water dispensers
- J. Cabinet and file drawer knobs / handles
- K. Phones and keypads
- L. Copier / printer / fax control buttons
- M. Sinks and faucets
- N. Light switches

In addition, the Contractor shall supply appropriate (CDC and Department of Health recommended and non-hazardous), cleaning and disinfection supplies (wipes and sprays), and single use gloves for the use of the CTDOT representatives, for disinfection of surfaces and equipment in between the 2 day interval noted above. The Contractor shall always maintain a minimum of 500 wipes and 100 pairs of disposable gloves in the field office.

Exterior areas shall be mowed and clean of debris. A trash receptacle (dumpster) with weekly pickup (trash removal) shall be provided. Snow removal, sanding and salting of all parking, walkway, and entrance ways areas shall be accomplished during a storm if on a workday during work hours, immediately after a storm and prior to the start of a workday. If snow removal, salting and sanding are not completed by the specified time, the State will provide the service and all costs incurred will be deducted from the next payment estimate.

Method of Measurement: The furnishing and maintenance of the construction field office will be measured for payment by the number of calendar months that the office is in place and in operation, rounded up to the nearest month.

There will not be any price adjustment due to any change in the minimum computer related hardware and software requirements.

Basis of Payment: The furnishing and maintenance of the Construction Field Office will be paid for at the Contract unit price per month for "Construction Field Office, (Type)," which price shall include all material, equipment, labor, service contracts, licenses, software, repair or replacement of hardware and software, related supplies, utility services, parking area, external illumination, trash removal, snow and ice removal, and work incidental thereto, as well as any other costs to provide requirements of this specification.

Pay Item Construction Field Office, (Type) Pay Unit Month

42-324

188



Maine

Basic Information

Summary

There are fewer DOT project requirements and regulations to consider in Maine than in a state like Connecticut. However, we're still looking at several considerations, from furnishing requirements to heating regulations.

We've included all the specifications you need to know about below, but you can always find more information on the Maine Department of Transportation <u>website</u>.

MDOT Contact Form: https://www.maine.gov/mdot/contact/

Contractor-specific Info: <u>https://www.maine.gov/mdot/contractors/</u>

MDOT Phone Number: 207-624-3000

Mailing Address: Maine Department of Transportation 16 SHS Augusta, ME 04333-0016



Layouts

Maine uses three primary layouts for field offices: **Type A**, **Type B**, **and Type C**. All three layouts will have ceilings at least seven feet tall, one toilet facility, and one wall closet each.

Type A

The Type A field office in Maine is the largest layout of the three. It has a floor area (outside dimension) of no less than **312 square feet** and a window area of **55 square feet**.



10' x 36' field office



Maine

Tion SUR

BRIQUES

Layouts



Type B

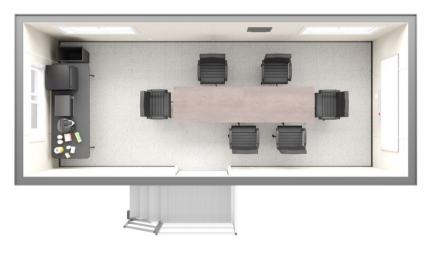
Maine's Type B field office is the next largest, with a minimum floor area square footage of **220**. It also has a window area of at least **35 square feet**.



8' x 32' field office

Type C

The Type C field office in Maine is the smallest layout available. It has a floor area of no less than **125 square feet**, and a window area of **35 square feet**.









Note: This section is a reproduction of the current MDOT requirements for field offices. For more information, consult the Maine Department of Transportation website.

<u>639.02 Materials</u> Materials for buildings shall be of good quality customarily used in standard frame house or office trailer construction.

<u>639.03 General</u> The building of the type called for shall be provided before the start of work, and shall remain until work is completed and accepted, unless earlier removal is authorized. The location shall be approved by the Resident and should be adjacent or virtually adjacent to the Project.

A fire extinguisher shall be provided in each building or office trailer for electrical and chemical fires and effective on all solvents used in the building.

Walls, roof, floor, windows, and doors shall be tightly constructed to the required area.

Furnishings shall be supplied as called for. Doors shall be equipped with locks and all keys shall be in the possession of the Resident. Windows shall be equipped with latches so they may be locked on the inside. Window screens and screen doors shall be supplied when necessary. Adequate desk and desk space shall be provided. If a portable table is supplied, it should be adjustable to accommodate the various heights of employees. A 5-way adjustable office chair shall be provided in the quantities listed.

<u>639.04 Field Offices</u> Field Offices are designated Type A, Type B, or Type C. Buildings, including trailers, may be provided if they substantially equal or exceed the following requirements. Air conditioning, appropriate to the building size, shall be provided in all field offices.

The walls, roof, and floor of the building shall be completely insulated with a minimum insulation value of R-15. Office trailers shall be either new or in very good used condition. The interior walls shall be covered with suitable wall paneling. The entire office trailer shall be for the exclusive use of the Resident. The office trailer shall be winterized and completely enclosed at the bottom, if the trailer will be used in cold weather.

Other types of buildings and facilities may be furnished of equal or better quality. A public work area will be provided in the field office that shall be designed and constructed so that individuals with disabilities can approach, enter, and exit this area.

At least one accessible route to the field office shall be provided from accessible parking. The accessible route shall comply with the Americans with Disabilities Act Accessibility Guidelines (ADAAG) and this specification.

The minimum clear width of an accessible route shall be 36 inches except at doors. The least possible slope shall be used for an accessible route. An accessible route with a running slope greater than 1:20 shall be considered a ramp. Maximum ramp slope is 1:12. The maximum rise for any run of a ramp shall be 30 inches and the minimum clear width shall be 36 inches. Nowhere shall the cross slope of an accessible route exceed 1:50. Changes in level up to ¼ inch may be vertical and without edge treatment. Changes in level between ¼



inch and $\frac{1}{2}$ inch shall be beveled with a slope no greater than 1:2. Ramp floor surfaces shall be stable, firm, and slip-resistant.

Ground floor surfaces along accessible routes and in accessible rooms and spaces including floors, walks, ramps, stairs, and curb ramps, shall be stable, firm, and slip-resistant.

The main door to the public work area shall have a minimum clear opening of 32 inches with the door opened 90 degrees, measured between the face of door and the opposite stop. Minimum maneuvering clearances at doors shall be provided. The floor or ground area within the required clearances shall be level and clear.

The handle and other operating devices on accessible doors shall have a shape that is easy to grasp with one hand and does not require tight grasping. Lever-operated mechanisms push type mechanisms, and U-shaped handles are acceptable designs. Hardware required for accessible door passage shall be mounted no higher than 48 inches above finished floor.

A minimum of 3 parking spaces will be supplied for Class B & C Field Offices and 6 for Class A. One wheelchair accessible parking space shall be located on the shortest accessible route of travel from adjacent parking to an accessible entrance.

Level landings shall be provided at bottom and top of each run. The landing shall be at least as wide as the ramp run leading to it with a minimum length of 60 inches.

If a ramp run has a rise greater than 6 inches or a horizontal projection greater than 72 inches, then it shall have handrails on both sides. Handrails shall have the following features:

 Handrails shall be provided along both sides of ramp segments. The inside handrail on switchback ramps shall always be continuous.

2) If handrails are not continuous, they shall extend at least 12 inches beyond the top and bottom of the ramp segment and shall be parallel with the floor or ground surface.

3) The clear space between the handrail and the wall shall be 11/2 inch.

4) Gripping surfaces shall be continuous.

5) Top of handrail gripping surfaces shall be mounted between 34 and 38 inches above ramp surfaces.

6) Ends of handrails shall be either rounded or returned smoothly to floor, wall, or post.

7) Handrails shall not rotate within their fittings.



6-116

8) The diameter or width of the gripping surfaces of a handrail shall be $1\frac{1}{4}$ to $1\frac{1}{2}$ inch, or the shape shall provide an equivalent gripping surface.

Firm and sturdy steps shall also be provided with 7 inch maximum riser and 11 inch minimum depth, and at least one handrail extending from the top of the steps to a minimum 12 inches beyond the bottom of the steps.

The Contractor will make reasonable effort(s) to provide wheelchair accessible toilet facilities when "portable" facilities are provided.

The Contractor shall provide wheelchair accessible toilet facilities when flush type facilities, that is, those with running water, are provided; and the Contractor shall provide wheelchair accessible portable facilities, if used, when the contract duration exceeds two continuous construction seasons.

Description		Quantity	
	Type A	Type B	Type C
Floor Area (Outside Dimension) - ft2	312	220	125
Inside Wall Height - feet	7	7	7
Window Area - ft ²	55	35	35
Drafting Table Surface Area - ft ²	15	15	15
Drafting Stools - each	2	1	1
Office Desks - each	2	1	1
Ergonomic Swivel Chairs -ea (5-way adjusta	able) 3	2	2
Folding Chairs - each	3	2	2
Lighting Units - each	4	2	2
Electric Wall Outlets - each	6	4	3
Power Strip Surge Protectors - each	3	2	1
Wall Closets - each	1	1	1
Plan Rack for minimum of 6 sets of plans	1	1	0
Toilet Facility	1	1	1
Wastebaskets - each	2	2	1

In addition to the facilities previously specified in this subsection, each field office shall meet the following minimum requirements:

All windows shall be provided with shades or blinds.

The toilet facility shall be for the exclusive use of State personnel. If requested, the Contractor will supply a lock to ensure exclusive use.

The Resident will have the option to reject any furniture or supplies provided to the field office based on general condition.

One hundred ten volt, 60 cycle, continuous electric service shall be supplied for lighting and 15 amp duplex wall outlets. Lighting shall consist of florescent light units with rapid



start bulbs or LED shop style lights located over the work areas for a minimum of 50 foot candles overall. At least one external light source will be provided.

Drafting surfaces shall be 40 inches above the floor and have shelves beneath. Shelves for plans and rolls shall also be furnished overhead. Drafting stools shall be approximately 28 inches high.

Desks shall be single or double pedestal standard office type, and shall be in addition to "built-in" type desks in the office trailer.

Field offices shall be furnished with one four-drawer letter size metal filing cabinet.

Wall closets shall be 21 inches wide, 15 inches deep, and at least 4 feet high.

Each office shall be furnished with a broom, dustpan, sweeping compound, trash bags, and with cleaning material for cleaning glass. If the field office is carpeted, then a vacuum cleaner will be provided. The contractor will be responsible for disposing of trash from the field office.

The Contractor shall provide a fully functional wireless desktop copier/scanner/printer, capable of copying field books, for the Resident's use during the project. All maintenance and supplies, except paper, shall be the responsibility of the Contractor.

The Contractor shall provide bottled water and a microwave for the duration of the project. All maintenance and supplies shall be the responsibility of the Contractor. Alternate source of water, such as a water cooler, may be provided as approved by resident.

The Contractor shall provide a 4 cubic-foot refrigerator in the field office for the duration of the project.

Each office shall be furnished with a 10-person general-purpose first aid kit. The first aid kit shall be periodically inspected and refilled as necessary.

<u>639.08 Heat</u> Heat appropriate to the building size shall be supplied by the Contractor to maintain an acceptable room temperature during occupancy.

639.091 Broadband Connection The contractor will supply one computer broadband connection, modem lease and router. The router shall have wireless access and be 802.11n or newer capable. The type of connection supplied will be contingent upon the availability of services (i.e. DSL or Cable Broadband). It shall be the contractor's option to provide dynamic or static IP addresses through the service. The selected service will have a minimum download connection of 5.0 Mbps and 1.0 Mbps upload. The contractor shall be responsible for the installation charges and all reinstallation charges following suspended periods. Monthly service and maintenance charges shall be billed by the Internet Service Provider (ISP) directly to the contractor.



6-118

<u>639.10 Method of Measurement</u> Field office will be measured by the unit or lump sum for each building provided, equipped and maintained satisfactorily.

<u>639.11 Basis of Payment</u> The accepted quantity of field office will be paid for at the contract unit price each or lump sum which payment shall be full compensation for furnishing until contract completion, erecting, equipping, maintaining, furnishing electricity, heating, installing and maintaining toilet facilities and if necessary removing the buildings or office trailers.

Payment for these items will be made in 3 parts; the first payment of $\frac{1}{2}$ to be made after the Contractor has supplied the building or office trailer and it has been approved. The remaining payments shall be made at intervals as follows:

A second payment of 1/4 shall be made when one-half of the anticipated work has been completed.

The final payment of the remaining 1/4 shall be made upon completion of the work.

Payment will be made under:

Pay Item

Pay Unit

639.18	Field Office, Type A	Each
639.19	Field Office, Type B	Each
639.20	Field Office, Type C	Each

SECTION 640 - VACANT

SECTION 641 - REST AREA FACILITIES Reserved

SECTION 642 - STEPS

<u>642.01 Description</u> This work shall consist of the construction of wooden steps, precast concrete steps or cast-in-place concrete steps in accordance with these specifications and in reasonably close conformity with dimensions and designs shown on the plans.

<u>642.02 Materials</u> Materials for the steps shall meet the requirements as specified in the following Sections of Division 700 - Materials:

Exterior Ready Mixed Paint	708.01	
Timber Preservative	708.05	
Precast Concrete Units	712.06	

6-119



Massachusetts

Basic Information

Summary

The DOT requirements and regulations for the state of Massachusetts are similar in length and complexity to Maine's. However, Massachusetts only has two field office layouts.

MassDOT Contact Form: https://www.mass.gov/forms/contact-massdot

MassDOT Contract Page: https://www.mass.gov/massdot-contract-opportunities

MassDOT Highway District Office Page: <u>https://www.mass.gov/service-details/find-your-highway-district-office</u>

MassDOT Phone Number: (857) 368-4636

Mailing Address: Massachusetts Department of Transportation 10 Park Plaza Suite 4160 Boston, MA 02116



Layouts

Massachusetts uses only two primary layouts for field offices: **Type A and Type B**. They've also kept everything simple—both types of field offices have the exact same specifications *except* for the size.

Type A

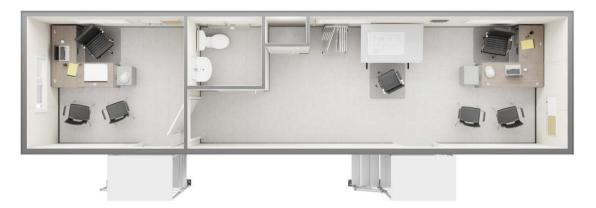
Type A field offices in Massachusetts feature a minimum floor space of **450 square feet**. They must also be equipped with a complete sanitary and washroom facility.



12' x 64' field office

Type B

Type B field offices have all of the same specifications as Type A. However, they must have a minimum of **350 square feet** of floor space.







Massachusetts



Note: This section is a reproduction of the current MassDOT requirements for field offices. For more information, consult the Massachusetts Department of Transportation website.

Massachusetts Department of Transportation – Highway Division Standard Specifications for Highways and Bridges

SUBSECTION 740: ENGINEER'S FIELD OFFICE AND MATERIALS LABORATORY (EACH WITH PERTINENT EQUIPMENT)

DESCRIPTION

740.20: General

Satisfactory office space, trailers, materials laboratory, or the utilization of a suitable existing building or buildings as directed shall be provided when required, in an approved location on the project or in the immediate vicinity thereof, for the exclusive use of the Engineers and Inspectors of the Department; such facilities to be separate from any building or buildings used by the Contractor.

740.21: Requirements

The trailers or buildings shall be fully equipped and made ready for use prior to the beginning of other work on the project and may remain for a period of approximately 45 days after all work on the project has been completed and accepted by the Department.

All offices and laboratories shall be maintained in good condition and appearance by the Contractor for the designated period, after which all portable buildings or trailers, fencing, surfacing and utilities shall be removed from the location, the areas cleaned, loamed and seeded if required, and left in a neat and acceptable condition.

If existing buildings are utilized, the above-mentioned requirements shall apply.

740.22: Building Types and Construction

The building or facilities may consist of any of the following, subject to approval of the Engineer.

- a. Moved onto or constructed on the site.
- b. A trailer or trailers, each type as stipulated in the Proposal.
- c. An existing building, owned or rented by the Contractor, containing floor space equivalent to the type specified.

Buildings or trailers moved onto or constructed on the project shall conform with the following:

A. General.

The work to be done under this section shall consist of furnishing all labor, equipment and materials to construct, furnish and maintain buildings or trailers for the Engineer's use, in accordance with the Department Standards and these Specifications.

The sanitary facilities are not for general use by the Contractor's employees. Sanitary provisions for these employees shall be provided otherwise by the Contractor in accordance with Subsection 7.02: Pollution Prevention, Paragraph F.

The work on buildings and trailers shall be completed before any other construction work is done at the site. Maintenance shall continue until the work at the site under the Contract is completed and the buildings or trailers shall be kept clean, orderly, and in working condition at all times.

II.346



Massachusetts Department of Transportation – Highway Division Standard Specifications for Highways and Bridges

The Contractor shall protect the buildings or trailers against theft throughout the 24 hours of the day and night and be responsible for any loss of property of the Department and the personal property of employees of the Department housed therein, due to either fire, theft or other causes.

B. Plumbing.

Each office shall be equipped with complete sanitary and washroom facilities. All connections shall conform with state and local requirements for venting and other sanitary provisions.

A ¾-in. copper tubing type L shall be installed for the water service. The water closets shall be provided with sufficient pressure to completely expel the contents in one operation.

Insulation shall be provided on all services where necessary. If directed, the Contractor shall furnish and install an approved electric tape, as directed, together with necessary switches and thermostat for each water pipe to prevent freezing.

If a sanitary sewer is not available, a septic system adequate for the office meeting the requirements of the Department of Environmental Protection regulations set forth in "The State Environmental Code Minimum Requirements for the Subsurface Disposal of Sanitary Sewage - Title 5" shall be installed.

The Department will not approve the location of a Field Office until the Contractor has obtained approval for their proposed method of sanitary sewage disposal from a) The Department of Environmental Protection if the location is on state property or b) Department of Environmental Protection and the applicable local Board of Health if the location is on private or municipal property.

The Contractor will be required to furnish personnel, equipment and materials for soil test pits and percolation tests and to furnish plans, prepared by a Registered Professional Engineer skilled in the matter of subsurface sewage disposal, signed and stamped with the Engineer's stamp, for any proposed subsurface sewage disposal system. The plan or plans will meet the requirements of Title 5 of the State Environmental Code or its successor or amendments thereto.

The Contractor will be required to determine, through the appropriate regional office of the Department of Environmental Protection, whether or not a proposed site is within a watershed area for public water supply.

Every effort will be made not to locate temporary Sanitary Facilities on any public water supply watershed. Should there be no alternative, the provisions of any regulations of D.E.P. Division of Water Supply and the above shall apply.

In the event that it can be shown that there is no place reasonably proximate to the job with suitable soil and site conditions that will permit subsurface sewage disposal, the Department of Environmental Protection will consider approval of a tight tank system. The Contractor will have their engineer submit their tight tank proposal and plans to the appropriate Regional Environmental Engineer of the Department of Environmental Protection in compliance with their "Sanitary Sewage Tight Tank Policy" for approval.

11.347



Massachusetts

Massachusetts Department of Transportation – Highway Division Standard Specifications for Highways and Bridges

C. Wiring and Lighting.

48-in. non-glare fluorescent luminaires shall be installed in each office so as to provide a minimum level of illumination at desk height of 100 foot-candles. Two fixtures shall be placed over the drawing table as directed. The master switch shall be near the door and control the desk light. Separate pull chains shall be provided for the lights over the table. Four double convenience outlets shall be installed where directed.

Electric wiring in each building or trailer shall be complete with meter connections, fuse box and switch.

D. Heating and Air Conditioning.

All buildings or trailers shall be heated and air conditioned with equipment capable of maintaining a temperature of 70°F, the total cost to be borne by the Contractor.

E. Area Enclosures, Surfacing and Maintenance.

The area occupied by the buildings or trailers shall be enclosed with 72-in. chain link fence, including a 12-ft clear opening double-swing gate, all with 3 strands of barbed wire on extension arms and conforming to the relevant provisions of Subsection 644: Chain Link Fences and Gates. The area to be enclosed will depend on the manner in which the buildings are arranged and shall be satisfactory to the Engineer.

A portion of the area within the enclosure designated by the Engineer for use as walks and parking, shall be graded and paved with 2.5-in. hot mix asphalt over a 6-in. gravel foundation.

The Contractor shall maintain the enclosed area by cleaning as required, including the removal of snow from the paved portions.

Toilet tissue, paper towels and soap shall be furnished by the Contractor as required. The office shall be cleaned and floors washed and waxed weekly. The space between the ground and trailer floor shall be completely closed in and insulated.

All of this work shall be included for payment under the contract price for furnishing the specified number and types of buildings.

F. Insurance and Replacement.

At the time the buildings are made available to the Department, the Contractor shall furnish evidence to the Engineer that Insurance in form, coverage and substance satisfactory to the Department in amount of \$5,000 (non-deductible) has been obtained which will protect the Commonwealth's property and/or employee's personal work related or professional equipment against loss of property in any of the buildings or trailers from fire, theft, storm or flood.

The insurance shall be kept in effect during the entire period of occupancy, with evidence of all necessary renewals being promptly forwarded to the Engineer.

In case of fire, theft or breakdown, all equipment involved shall be repaired or replaced by the Contractor within 48 hours.

In the event buildings or trailers, being used as field offices or materials laboratory, are destroyed or rendered untenable for any reason, they shall be replaced within two weeks, or as directed.

11.348





Massachusetts Department of Transportation – Highway Division Standard Specifications for Highways and Bridges

Title to the buildings and equipment shall remain in the name of the Contractor.

MATERIALS (EQUIPMENT)

740.40: General

Buildings or trailers shall have equipment as hereinafter specified, which shall be new or in condition satisfactory to the Engineer. The repair or replacement of faulty equipment shall be prompt and at the expense of the Contractor. All equipment will remain the property of the contractor. A suitable non-freezing type fire extinguisher shall be furnished for each field office and materials laboratory.

740.41: Engineers Field Office (Type A)

In addition to the general requirements, the Type A office shall provide a minimum of 450 ft² of floor space with two outside doors, six windows and be furnished as follows:

- 1. A slant top drafting table, 36-in. x 72-in. minimum size, two plan racks and a closet equipped with a lock.
- 2. Two office type desks, minimum top dimensions 30-in. x 60-in., with two or more drawers on each side.
- 3. Four desk chairs on casters with adjustable height tilt seat.
- 4. Four stools (Drafting table type).
- 5. One fire resistant drawer-type safe, legal size, with combination lock. Combination to be reset at the direction of the Engineer and revealed only to them.
- 6. A utility table 30 in. high, minimum top size 30-in. x 60-in.
- 7. Two legal size, fire-resistant metal filing cabinets, 4 drawer, with locks.
- 8. An electric sanitary hot and cold water cooler, supplied with cups and drinking water, a 3 ft³ capacity refrigerator with freezer compartment and a 1 ft³ capacity microwave oven.
- 9. An electric adding machine, tape type, with tape.
- 10. Office equipment as follows:
 - (a) A fully automatic electric calculator, with printout and sufficient supply of tapes.
 - (b) Quantity Control Ledger covers, National model no. 94-592 or approved equal. QCL covers shall become the property of the Department.
 - (c) A smoke alarm capable of being heard 500 ft away.
 - (d) 2 portable amber colored strobe lights for mounting on vehicles.
- 11. Safety helmets and safety vests for all Department Construction personnel assigned to the project. The safety equipment will not carry any marking such as the name of the Contractor and shall remain the property of the Contractor after completion of the project.
- 12. A trailerized office shall be provided with a one half bath that shall consist of a full size water closet and a porcelain steel lavatory recessed in a plastic top. The drain and vent lines shall be A.B.S. plastic and supply lines shall be type L copper. A 6-gallon electric water heater shall be provided.
- 13. First Aid Kits shall be provided in the amount and with contents as specified in the current requirements of the Massachusetts Department of Labor and Industries regulations.
- 14. One new or like new Survey Transit, complete with tripod and storage container, for the exclusive use of the Resident Engineer for the duration of the contract. The transit shall be suitable for Construction Surveys, to establish line and grade, equipped with horizontal

II.349





Massachusetts Department of Transportation – Highway Division Standard Specifications for Highways and Bridges

circle direct-reading to 1 minute and vernier calibrations graduated to at least 20 seconds, a vertical angle gradation with vernier to 30 seconds, crosshairs for stadia measurements, optical plumbing capability. A compatible level rod with a minimum length of 12 ft shall also be supplied for setting elevations for structures, grades, and stakes.

- 15. One 2-ft electronic smart level, one 100-ft steel tape, one 100-ft cloth tape and one plumb bob.
- 16. One electrostatic or plain paper copier capable of producing 8.5-in. x 11-in., or 8.5-in. x 14in. copies. Included shall be the cost of paper and chemicals. The total cost for the paper and chemicals shall not exceed \$500, for the life of the project. Only one copier will be required if there is more than one Field Office in the Contract.
- 17. The Contractor shall assume the cost of all equipment, including installation, service, maintenance, and removal. A working telephone with an answering machine shall be provided at the Engineer's Field Office.
- The following materials testing and sampling equipment shall be supplied if the Contract specifies 150 yd³ of cement concrete or more and does not require a Materials Laboratory.

 - (b) Two Concrete Curing Boxes meeting the requirements of AASHTO T 23, Section 9.
 - (c) A Quick Check Air Indicator Kit meeting the requirements of AASHTO T 199.
 - (d) One complete Slump Test Outfit (Ref. AASHTO T 23 and T 119M/T 119), as follows:
 - A slump cone of seamless spun metal, with handles and foot clamps.
 - A tamping rod, 24 in. long, 5%-in. diameter, with hemispherical end.
 - A sturdy pan, 14 gauge metal, with reinforced rims (24 in. x 24 in. x 3 in.).
 - A brass-wire briquette brush.
 - A wooden handled steel trowel, 3.5 in. x 7 in.
 - (e) One wheelbarrow, minimum 2 ft³ volume.
 - (f) One longhandled shovel.
 - (g) If 150 yd³ of lightweight concrete are specified in the Contract, the following shall be supplied:
 - (1) One Roller Meter type air meter (Ref. AASHTO T 196M/T 196).
 - (2) One Unit weight bucket (Ref. AASHTO T 121M/T 121).
 - (3) One platform beam scale, capacity 200 lb, sensitivity 0.01 lb, with two beams at front of platform, reading to 20 lb by single pounds and to 1 lb by 0.01 lb, with additional hanger weights to fulfill capacity of 200 lb; all parts to be of steel with enclosed weighing mechanism, platform to be 12.5 in. x 14 in. A digital platform scale, with a minimum capacity of 200 lb, with similar sensitivity can be substituted. Scale must be calibrated immediately prior to start of Contract.
- 19. The following shall be supplied if the Contract specifies painting of bridges:
 - (a) Two Each Wet Film Thickness gauges (1 to 13 mils range).
 - (b) One Dry Film Thickness Gauge (Tooke Mark III or equal) equipped with spare set of cutting tips.
 - (c) One Dry Film Thickness (Gauge Nordsen or Inspector Model III) range 0 to 25 mils.
 - (d) One Sling Psychrometer.
- 20. The following sampling containers are to be supplied in the minimum quantity listed and more as needed to complete the project. All unused containers remaining at the close of the project shall be delivered to the District laboratory and become property of the Department.

II.350





Massachusetts Department of Transportation – Highway Division Standard Specifications for Highways and Bridges

- (a) Flat Bottom Poly Lined Kraft Paper Bags capable of holding 60 lb of soil or aggregates with dimensions of at least 12 x 3 x 25 in. Supply a minimum of 50 bags.
- (b) 4-in. or 6-in. Plastic Cylinder Molds and Covers meeting the requirements of AASHTO M 205M/M 205 and approved for use by RMS. Supply 5 cylinders molds per 150 yd³ of concrete placement or fraction thereof with a minimum of 50 molds.
- (c) 1-qt Metal Cans with friction top covers. Supply a minimum of 12 cans when the contract specifies bridge painting.
- (d) 1-qt Wide Mouth Plastic Bottles and Covers designed to hold acid. Supply a minimum of 12 bottles when the contract specifies bridge painting or traffic paint.
- (e) Cardboard Sample Boxes for hot mix asphalt. The sample boxes shall have dimensions of at least 17 x 12 x 4.5 in. and fold to provide a tight closure for transporting. Supply a minimum of 25 boxes.

740.42: Engineers Field Office (Type B)

Engineers Field Office (Type B) shall be equipped as described in 740.41: Engineers Field Office (Type A) except that the minimum floor space shall be 350 ft².

COMPENSATION

740.81: Basis of Payment

Payment for work under these items will be at the respective contract unit bid price for Engineer's Field Office and Equipment (Type A) and Engineering Field Office and Equipment (Type B).

Payment as described above shall be compensation for all services (heat, gas, light, water, sanitary, telephone, etc.) for all labor, material, fencing, surfacing, equipment service (including general inside cleaning at least once each week) and incidentals necessary to provide, equip, maintain, insure, remove and dispose of the buildings and clean the site as specified and directed. The contract unit bid price will prevail for buildings built or furnished as described, for equivalent trailer space, or office space rented in existing buildings, when such substitution has been approved.

740.82: Payment Items

740.	Engineer's Field Office and Equipment (Type A)Month
741.	Engineer's Field Office and Equipment (Type B)Month

SUBSECTION 746: TRANSPORTATION VEHICLE

DESCRIPTION

746.20: General

This item consists of furnishing and maintaining a current model vehicles equipped with strobe lights for the use of Department personnel assigned to the project.

II.351



New Hampshire

Basic Information

Summary

New Hampshire's DOT requirements for field offices mostly include the standard regulations that we see in other states. However, what's different is that there are **four types of field offices**, with one of them including regulations for **field laboratories**.

We'll cover the rest below, and you can find all the information you need on the <u>New Hampshire Department of Transportation website</u> as well.

NHDOT Contact Page: https://www.nh.gov/dot/contactus/index.htm

NHDOT Laws, Policies, & Procedures Page: https://www.nh.gov/dot/laws/index.htm

NHDOT Public Information Office Number: (603) 271-6495

Mailing Address: New Hampshire Department of Transportation John O. Morton Building 7 Hazen Drive PO Box 483 Concord, New Hampshire 03302-0483





New Hampshire has four field office layouts:

- Type A
- Type B
- Type C
- Type D and Field Laboratory

Types B, C, D, and any field laboratories have a minimum ceiling height of **seven feet.** Every type of field office must also be equipped with a built-in lavatory and toilet facility with hot and cold water.

Type A

The Type A field office designation in New Hampshire is considered the "Special Provision" option and doesn't have any specific size requirements. Instead, it must meet the minimum size requirements as described by the Special Provision included in the Proposal.



12' x 64' field office



Layouts

Type B

The Type B field office designation in New Hampshire must have a minimum of **650** square feet of nominal floor space. It should also have a minimum of three partitioned areas, with two dedicated to specified uses. One area of approximately **120-150** square feet for installing all computer components and another approximately **250** square feet to be used as a conference room.



12' x 60' field office (Triumph Modular Silverline)

Type C

The Type C field office designation in New Hampshire must have a minimum of **300 square feet** of nominal floor space. It also must be partitioned into **two separate areas**, with one of those areas having approximately **125 square feet** of space with an interior door and lock.







Layouts

Type D and Field Laboratory

The Type D and Field Laboratory designation in New Hampshire must have a minimum of **200 square feet** of nominal floor space. There are no specific requirements for interior partitions.



8' x 32' field office





Note: This section is a reproduction of the current NHDOT requirements for field offices. For more information, consult the New Hampshire Department of Transportation Website.

		SECTION 698 FIELD FACILITIES
Description		
Materials		
2.1.1	Field Office Type A.	
2.1.2	Field Office Type B.	
2.1.3	Field Office Type C.	- Children and
2.1.4		nd Field Laboratory.
	Field Office Equipment.	for all field Officer
2.2.1	Equipment Required	t for Field Office Type A, Type B, Type C, and Type D
		t for Field Office Type A, Type B, Type C, and Type D
	on Requirements	
	Facilities.	STATUS IN
3.2 1	Maintenance, Service, a	ind Utilities.
Method of	Measurement	
Basis of Pay	yment	
		Description
		ing, leveling, maintaining, and removing facilities and providing the required equipment and shall be within approximately ¼ mile of the project limits and subject to the approval of th
		Materials
	Office Type A.	
Dir	mensions:	
	mensions:	included in the Proposal.
		included in the Proposal.
Inte	mensions:	included in the Proposal. Shall meet the minimum size requirements as described by the Special Provision
Inte	mensions: erior:	included in the Proposal. Shall meet the minimum size requirements as described by the Special Provision included in the Proposal. Built-in lavatory and toilet facilities with hot and cold water.
Inte Lav Ele	mensions: erior: vatory:	 included in the Proposal. Shall meet the minimum size requirements as described by the Special Provision included in the Proposal. Built-in lavatory and toilet facilities with hot and cold water. Adequate overhead lighting at each work area and two power outlets per room including one exterior outlet light near entrance.
Inte Lav Ele	mensions: erior: vatory: ectrical: • Conditioner(s):	 included in the Proposal. Shall meet the minimum size requirements as described by the Special Provision included in the Proposal. Built-in lavatory and toilet facilities with hot and cold water. Adequate overhead lighting at each work area and two power outlets per room including one exterior outlet light near entrance. Central air conditioning or a sufficient number of individual units to maintain
Inte Lav Ele Air He:	mensions: erior: vatory: ectrical: • Conditioner(s):	 included in the Proposal. Shall meet the minimum size requirements as described by the Special Provision included in the Proposal. Built-in lavatory and toilet facilities with hot and cold water. Adequate overhead lighting at each work area and two power outlets per room including one exterior outlet light near entrance. Central air conditioning or a sufficient number of individual units to maintain maximum temperature of 78° F.
Inte Lav Ele Air He: We	mensions: erior: vatory: ectrical: r Conditioner(s): at:	 included in the Proposal. Shall meet the minimum size requirements as described by the Special Provision included in the Proposal. Built-in lavatory and toilet facilities with hot and cold water. Adequate overhead lighting at each work area and two power outlets per room including one exterior outlet light near entrance. Central air conditioning or a sufficient number of individual units to maintain maximum temperature of 78° F. Thermostatically controlled to maintain a minimum temperature of 68° F.
Inte Lav Ele Air He: We 2.1.2 Field	mensions: erior: vatory: exetrical: Conditioner(s): at: eatherproofing: Office Type B.	 included in the Proposal. Shall meet the minimum size requirements as described by the Special Provision included in the Proposal. Built-in lavatory and toilet facilities with hot and cold water. Adequate overhead lighting at each work area and two power outlets per room including one exterior outlet light near entrance. Central air conditioning or a sufficient number of individual units to maintain maximum temperature of 78° F. Thermostatically controlled to maintain a minimum temperature of 68° F. Roof, sides, and floor shall be maintained weatherproof at all times.
Inte Lav Ele Air He: <u>We</u> 2.1.2 Field Dir	mensions: erior: vatory: exetrical: conditioner(s): at: eatherproofing: Office Type B. mensions:	 included in the Proposal. Shall meet the minimum size requirements as described by the Special Provision included in the Proposal. Built-in lavatory and toilet facilities with hot and cold water. Adequate overhead lighting at each work area and two power outlets per room including one exterior outlet light near entrance. Central air conditioning or a sufficient number of individual units to maintain maximum temperature of 78° F. Thermostatically controlled to maintain a minimum temperature of 68° F. Roof, sides, and floor shall be maintained weatherproof at all times.
Inte Lav Ele Air He: We 2.1.2 Field Dir	mensions: erior: vatory: exetrical: Conditioner(s): at: eatherproofing: Office Type B.	 included in the Proposal. Shall meet the minimum size requirements as described by the Special Provision included in the Proposal. Built-in lavatory and toilet facilities with hot and cold water. Adequate overhead lighting at each work area and two power outlets per room including one exterior outlet light near entrance. Central air conditioning or a sufficient number of individual units to maintain maximum temperature of 78° F. Thermostatically controlled to maintain a minimum temperature of 68° F. Roof, sides, and floor shall be maintained weatherproof at all times. Minimum of 650 ft2 of nominal floor space and minimum of 7 ft. in height. Minimum of three partitioned areas. One area shall be approximately 120-150 ft² fo the installation of all computer components with interior door and lock. Anothe area shall be approximately 250 ft² for use as a conference room. Each majo
Inte Lav Ele Air He: We 2.1.2 Field Dir Inte	mensions: erior: vatory: exetrical: conditioner(s): at: eatherproofing: Office Type B. mensions:	 included in the Proposal. Shall meet the minimum size requirements as described by the Special Provision included in the Proposal. Built-in lavatory and toilet facilities with hot and cold water. Adequate overhead lighting at each work area and two power outlets per room including one exterior outlet light near entrance. Central air conditioning or a sufficient number of individual units to maintain maximum temperature of 78° F. Thermostatically controlled to maintain a minimum temperature of 68° F. Roof, sides, and floor shall be maintained weatherproof at all times. Minimum of 650 ft2 of nominal floor space and minimum of 7 ft. in height. Minimum of three partitioned areas. One area shall be approximately 120-150 ft² fo the installation of all computer components with interior door and lock. Anothe area shall be approximately 250 ft² for use as a conference room. Each majo area shall have telephone plug-in jacks. The computer area shall have a additional telephone jack for the computer.
Inte Lav Ele Air He: We 2.1.2 Field Dir Inte	mensions: erior: vatory: cetrical: conditioner(s): at: eatherproofing: Office Type B. mensions: erior:	 included in the Proposal. Shall meet the minimum size requirements as described by the Special Provision included in the Proposal. Built-in lavatory and toilet facilities with hot and cold water. Adequate overhead lighting at each work area and two power outlets per room including one exterior outlet light near entrance. Central air conditioning or a sufficient number of individual units to maintain maximum temperature of 78° F. Thermostatically controlled to maintain a minimum temperature of 68° F. Roof, sides, and floor shall be maintained weatherproof at all times. Minimum of 650 ft2 of nominal floor space and minimum of 7 ft. in height. Minimum of three partitioned areas. One area shall be approximately 120-150 ft² fo the installation of all computer components with interior door and lock. Anothe area shall be approximately 250 ft² for use as a conference room. Each majo area shall have telephone plug-in jacks. The computer area shall have a additional telephone jack for the computer.
Inte Lav Ele Air He: We 2.1.2 Field Dir Inte	mensions: erior: vatory: cetrical: conditioner(s): at: eatherproofing: Office Type B. mensions: erior:	 included in the Proposal. Shall meet the minimum size requirements as described by the Special Provision included in the Proposal. Built-in lavatory and toilet facilities with hot and cold water. Adequate overhead lighting at each work area and two power outlets per room including one exterior outlet light near entrance. Central air conditioning or a sufficient number of individual units to maintain maximum temperature of 78° F. Thermostatically controlled to maintain a minimum temperature of 68° F. Roof, sides, and floor shall be maintained weatherproof at all times. Minimum of 650 ft2 of nominal floor space and minimum of 7 ft. in height. Minimum of three partitioned areas. One area shall be approximately 120-150 ft² fo the installation of all computer components with interior door and lock. Anothe area shall be approximately 250 ft² for use as a conference room. Each majo area shall have telephone plug-in jacks. The computer area shall have a additional telephone jack for the computer. Building office space: Built-in lavatory and toilet facilities with hot and cold water. Mobile office space: Portable toilet facilities per 2.1.5
Inte Lav Ele Air He: We 2.1.2 Field Dir Inte Lav Clo	mensions: erior: vatory: cetrical: conditioner(s): at: eatherproofing: Office Type B. mensions: erior: vatory:	 Shall meet the minimum size requirements as described by the Special Provision included in the Proposal. Built-in lavatory and toilet facilities with hot and cold water. Adequate overhead lighting at each work area and two power outlets per room including one exterior outlet light near entrance. Central air conditioning or a sufficient number of individual units to maintain a maximum temperature of 78° F. Thermostatically controlled to maintain a minimum temperature of 68° F. Roof, sides, and floor shall be maintained weatherproof at all times. Minimum of 650 ft2 of nominal floor space and minimum of 7 ft. in height. Minimum of three partitioned areas. One area shall be approximately 120-150 ft² fo the installation of all computer components with interior door and lock. Anothe area shall be approximately 250 ft² for use as a conference room. Each majo area shall have telephone plug-in jacks. The computer area shall have an additional telephone jack for the computer. Building office space: Built-in lavatory and toilet facilities with hot and cold water.
Inte Lav Ele Air He: Vec 2.1.2 Field Dir Inte Lav Clc Wi	mensions: erior: vatory: cetrical: conditioner(s): at: eatherproofing: Office Type B. mensions: erior: vatory: osets: ndows:	 included in the Proposal. Shall meet the minimum size requirements as described by the Special Provision included in the Proposal. Built-in lavatory and toilet facilities with hot and cold water. Adequate overhead lighting at each work area and two power outlets per room including one exterior outlet light near entrance. Central air conditioning or a sufficient number of individual units to maintain maximum temperature of 78° F. Thermostatically controlled to maintain a minimum temperature of 68° F. Roof, sides, and floor shall be maintained weatherproof at all times. Minimum of 650 ft2 of nominal floor space and minimum of 7 ft. in height. Minimum of three partitioned areas. One area shall be approximately 120-150 ft² fc the installation of all computer components with interior door and lock. Another area shall be approximately 250 ft² for use as a conference room. Each major area shall have telephone plug-in jacks. The computer area shall have a additional telephone jack for the computer. Building office space: Built-in lavatory and toilet facilities with hot and cold water. Mobile office space: Portable toilet facilities per 2.1.5 Built in, approximately 22 in deep by 3 feet wide. Minimum of two per partitioned area with locks and screens providing cross
Inte Lav Ele Air He: Vec 2.1.2 Field Dir Inte Lav Clc Wi	mensions: erior: vatory: cetrical: conditioner(s): at: eatherproofing: Office Type B. mensions: erior: vatory:	 included in the Proposal. Shall meet the minimum size requirements as described by the Special Provision included in the Proposal. Built-in lavatory and toilet facilities with hot and cold water. Adequate overhead lighting at each work area and two power outlets per room including one exterior outlet light near entrance. Central air conditioning or a sufficient number of individual units to maintain maximum temperature of 78° F. Thermostatically controlled to maintain a minimum temperature of 68° F. Roof, sides, and floor shall be maintained weatherproof at all times. Minimum of 650 ft2 of nominal floor space and minimum of 7 ft. in height. Minimum of three partitioned areas. One area shall be approximately 120-150 ft² ft the installation of all computer components with interior door and lock. Anothed area shall be approximately 250 ft² for use as a conference room. Each major area shall have telephone plug-in jacks. The computer area shall have a additional telephone jack for the computer. Building office space: Built-in lavatory and toilet facilities with hot and cold water. Mobile office space: Portable toilet facilities per 2.1.5 Built in, approximately 22 in deep by 3 feet wide. Minimum of two per partitioned area with locks and screens providing cros ventilation.



SECTION 698

Electrica	l:	Adequate overhead lighting at each work area and two power outlets per room including one exterior outlet light near entrance.
Air Cond	litioner(s):	Central air conditioning or a minimum of two individual units (one in the compute area) sized to maintain a maximum temperature of 78° F.
Heat:		Thermostatically controlled to maintain a minimum temperature of 68° F.
Weather	proofing:	Roof, sides, and floor shall be maintained weatherproof at all times.
3 Field Offic	e Type C.	
Dimensio	ons:	Minimum of 300 ft2 of nominal floor space and minimum of 7 ft. in height.
Interior:		Minimum of two partitioned areas, one being approximately 125 ft2 with interior door and lock.
Lavatory	:	Building office space: Built-in lavatory and toilet facilities with hot and cold.
		Mobile office space: Portable toilet facilities per 2.1.5
Closets:		Built in, approximately 22 in deep by 3 feet wide.
Windows	5:	Minimum of four with locks and screens providing cross ventilation.
Doors:		Minimum of two with locks.
Electrica	l:	Adequate overhead lighting at each work area and two power outlets per room including one exterior outlet light near entrance.
Air Cond	litioner(s):	Central air conditioning or a minimum of two units (one in the computer area) sized to maintain a maximum temperature of 78° F.
Heat:		Thermostatically controlled to maintain a minimum temperature of 68° F.
Weathern	proofing:	Roof, sides, and floor shall be maintained weatherproof at all times.
4 Field Offic	e Type D and Field	Laboratory.
Dimensio	ons:	Minimum of 200 ft2 nominal floor space and a minimum of 7 ft. in height.
Windows	s:	Minimum of two with locks and screens providing cross ventilation.
Lavatory		Building office space: Built-in lavatory and toilet facilities with hot and cold water.
		Mobile office space: Portable toilet facilities per 2.1.5.
Closets:		Built in, approximately 22 in deep by 3 feet wide.
Doors:		Minimum of one with lock.
Electrica	1:	Adequate overhead lighting at each work area and two power outlets per room including one exterior outlet.
Air Cond	litioner:	Central air conditioning or individual unit(s) sized to maintain a maximum temperature of 78° F.
Heat:		Thermostatically controlled to maintain a minimum temperature of 68° F.
Weather	· · · · · · · · · · · · · · · · · · ·	Roof, sides, and floor shall be maintained weatherproof at all times.

2.1.5 Toilet facilities for mobile office space shall be a separate facility fabricated from steel, fiberglass, or wood, housing a portable chemical toilet, provided by the Contractor. This building shall be well ventilated, shall conform to State law, and shall have a vented chemical tank and a separate urinal. This facility should also be equipped with water-less hand cleaner/sanitizer.

2.1.5.1 For mobile office space, non-operational toilets and sinks shall be removed so that the space can be used for additional storage. Any holes or exposed plumbing left behind due to the removal of the toilet and sink shall be adequately protected.

2.2 Field Office Equipment.

2.2.1	Equipment	Required	for all	Field	Offices.	
-------	-----------	----------	---------	-------	----------	--

	Water Cooler:	1, new or like new 5 gallon car	acity, bottled water supplied and maintained.
	MUTCD:	Streets and Highways and any s	nual on Uniform Traffic Control Devices for supplements or amendments thereto, available ocuments, U.S. Government Printing Office,
	Measuring Wheel:	 1, 15" minimum diameter with tenth of a foot, built-in stand, a 	h capacity to record up to 10,000 feet to the nd storage case.
	4' direct reading leve		0.00
	10' metal straight ed	e: Light-weight metal straightedg	e with a rectangular cross-section of 2 by 4"
Go To =➔	TOC Division 100 Division 500	Division 200 Division 300 Division 400 Division 600 Division 700	2016 NHDOT Standard Specifications



SECTION 698

Marking Paint:	Adequate supply, lead-free, non-clogging; color as ordered by the Engi
Pencil Sharpener:	1, standard size.
Calculator/Adding Machine	1, desktop print/display with minimum of ten digits.
Facsimile Machine:	This machine shall have the capability of sending and receiving $8-1/2 x$ on paper on a single separate committed telephone line. The following
	minimum specifications shall also apply:
	Transmission time: 16 seconds per page at standard resolution
	Transmission speed: 10ms/line @ 98 lines/in.
	Reception speed: 20ms/line @ 98 lines/in.
	Document length: 14.5" maximum, 4" minimum
	Auto document feed: 15 pages maximum
	Horiz. Print resolution: 203 pixels/in.
	Vertical print resolution: 98 lines/in., standard
	All connections and supplies necessary to allow successful operation of machine shall be provided by the Contractor.
Thermometer:	1, indoor/outdoor type.
Trash Receptacle:	1, per portioned space including trash bags.
Three Hole Punch	1, each.
Vacuum Cleaner:	1, electric (5hp minimum), utility shop-vac (10 gal capacity minimum)
	25 ft. extension cord.
Floor Broom/Dust Pan:	l each.
First Aid Kit:	Shall contain a minimum of:
	20-adhesive bandages, 3/4" wide.
	1-first aid tape, 1/2 by 180"
	1-flexible gauze bandage, 2 by 126"
	1-flexible gauze bandage, 4 by 126"
	1-triangular bandage
	10-antiseptic swabs
	3-sterile pads, 3 by 3"
	3-ammonia inhalants
	antiseptic cream
	aspirin
	eyewash kit
	poison ivy cream
	scissors
	tweezers
	1, current first aid book
D. C.	bug and/or tick repellent
Rain Gauge:	1, constructed from a clear material, minimum ¼" permanently marked
ditional Equipment for Field O	graduations, minimum 6" capacity with mounting bracket. ffice Type A, Type B, Type C, and Type D
Watani	
Water: Fire Extinguisher:	Type A: Water service to supply lavatory
Water: Fire Extinguisher:	Type A, B & C: 2, multi-purpose (A, B, C), dry powder, minimum 5 lb. s
Fire Extinguisher:	Type A, B & C: 2, multi-purpose (A, B, C), dry powder, minimum 5 lb. si Type D: 1, multi-purpose (A, B, C), dry powder, minimum 5 lb. size.
	Type A, B & C: 2, multi-purpose (A, B, C), dry powder, minimum 5 lb. si Type D: 1, multi-purpose (A, B, C), dry powder, minimum 5 lb. size. Type A: per Special Provision included in the Proposal.
Fire Extinguisher:	Type A, B & C: 2, multi-purpose (A, B, C), dry powder, minimum 5 lb. si Type D: 1, multi-purpose (A, B, C), dry powder, minimum 5 lb. size. Type A: per Special Provision included in the Proposal. Type B: five furnished with drawers.
Fire Extinguisher:	Type A, B & C: 2, multi-purpose (A, B, C), dry powder, minimum 5 lb. si Type D: 1, multi-purpose (A, B, C), dry powder, minimum 5 lb. size. Type A: per Special Provision included in the Proposal. Type B: five furnished with drawers. Type C: four furnished with drawers.
Fire Extinguisher: Office Desks:	Type A, B & C: 2, multi-purpose (A, B, C), dry powder, minimum 5 lb. s Type D: 1, multi-purpose (A, B, C), dry powder, minimum 5 lb. size. Type A: per Special Provision included in the Proposal. Type B: five furnished with drawers. Type C: four furnished with drawers. Type D: one furnished with drawers.
Fire Extinguisher:	 Type A, B & C: 2, multi-purpose (A, B, C), dry powder, minimum 5 lb. si Type D: 1, multi-purpose (A, B, C), dry powder, minimum 5 lb. size. Type A: per Special Provision included in the Proposal. Type B: five furnished with drawers. Type C: four furnished with drawers. Type D: one furnished with drawers. Type A: Per Special Provision in the Proposal.
Fire Extinguisher: Office Desks:	 Type A, B & C: 2, multi-purpose (A, B, C), dry powder, minimum 5 lb. si Type D: 1, multi-purpose (A, B, C), dry powder, minimum 5 lb. size. Type A: per Special Provision included in the Proposal. Type B: five furnished with drawers. Type C: four furnished with drawers. Type D: one furnished with drawers. Type A: Per Special Provision in the Proposal. Type A: Per Special Provision in the Proposal. Type B: five
Fire Extinguisher: Office Desks:	 Type A, B & C: 2, multi-purpose (A, B, C), dry powder, minimum 5 lb. si Type D: 1, multi-purpose (A, B, C), dry powder, minimum 5 lb. size. Type A: per Special Provision included in the Proposal. Type B: five furnished with drawers. Type C: four furnished with drawers. Type D: one furnished with drawers. Type A: Per Special Provision in the Proposal. Type B: five Type B: five Type B: five Type C: four
Fire Extinguisher: Office Desks: Desk Chairs:	 Type A, B & C: 2, multi-purpose (A, B, C), dry powder, minimum 5 lb. si Type D: 1, multi-purpose (A, B, C), dry powder, minimum 5 lb. size. Type A: per Special Provision included in the Proposal. Type B: five furnished with drawers. Type D: one furnished with drawers. Type A: Per Special Provision in the Proposal. Type B: five Type B: five Type B: five Type C: four Type D: one
Fire Extinguisher: Office Desks:	 Type A, B & C: 2, multi-purpose (A, B, C), dry powder, minimum 5 lb. si Type D: 1, multi-purpose (A, B, C), dry powder, minimum 5 lb. size. Type A: per Special Provision included in the Proposal. Type B: five furnished with drawers. Type D: one furnished with drawers. Type A: Per Special Provision in the Proposal. Type B: five Type B: five Type C: four Type B: five Type C: four Type D: one Type C: four Type D: one Type A: Per Special Provision included in the Proposal.
Fire Extinguisher: Office Desks: Desk Chairs: Conference Table:	 Type A, B & C: 2, multi-purpose (A, B, C), dry powder, minimum 5 lb. si Type D: 1, multi-purpose (A, B, C), dry powder, minimum 5 lb. size. Type A: per Special Provision included in the Proposal. Type B: five furnished with drawers. Type D: one furnished with drawers. Type A: Per Special Provision in the Proposal. Type B: five Type B: five Type C: four Type B: five Type C: four Type D: one Type C: four Type C: four Type C: four Type D: one Type A: Per Special Provision included in the Proposal. Type B & C: 1, minimum dimensions 8 ft. by 2.5 ft.
Fire Extinguisher: Office Desks: Desk Chairs:	 Type A, B & C: 2, multi-purpose (A, B, C), dry powder, minimum 5 lb. si Type D: 1, multi-purpose (A, B, C), dry powder, minimum 5 lb. size. Type A: per Special Provision included in the Proposal. Type B: five furnished with drawers. Type D: one furnished with drawers. Type A: Per Special Provision in the Proposal. Type B: five Type C: four Type B: five Type C: four Type D: one Type C: four Type D: one Type C: four Type D: one Type A: Per Special Provision included in the Proposal. Type B & C: 1, minimum dimensions 8 ft. by 2.5 ft. Type A: Per Special Provision included in the Proposal.
Fire Extinguisher: Office Desks: Desk Chairs: Conference Table:	 Type A, B & C: 2, multi-purpose (A, B, C), dry powder, minimum 5 lb. si Type D: 1, multi-purpose (A, B, C), dry powder, minimum 5 lb. size. Type A: per Special Provision included in the Proposal. Type B: five furnished with drawers. Type D: one furnished with drawers. Type A: Per Special Provision in the Proposal. Type B: five Type C: four Type B: five Type C: four Type D: one Type C: four Type D: one Type C: four Type D: one Type A: Per Special Provision included in the Proposal. Type B & C: 1, minimum dimensions 8 ft. by 2.5 ft. Type B: ten
Fire Extinguisher: Office Desks: Desk Chairs: Conference Table:	 Type A, B & C: 2, multi-purpose (A, B, C), dry powder, minimum 5 lb. si Type D: 1, multi-purpose (A, B, C), dry powder, minimum 5 lb. size. Type A: per Special Provision included in the Proposal. Type B: five furnished with drawers. Type D: one furnished with drawers. Type A: Per Special Provision in the Proposal. Type B: five Type C: four Type B: five Type C: four Type D: one Type D: one Type A: Per Special Provision included in the Proposal. Type B: five Type C: four Type D: one Type A: Per Special Provision included in the Proposal. Type B & C: 1, minimum dimensions 8 ft. by 2.5 ft. Type A: Per Special Provision included in the Proposal.
Fire Extinguisher: Office Desks: Desk Chairs: Conference Table:	 Type A, B & C: 2, multi-purpose (A, B, C), dry powder, minimum 5 lb. si Type D: 1, multi-purpose (A, B, C), dry powder, minimum 5 lb. size. Type A: per Special Provision included in the Proposal. Type B: five furnished with drawers. Type D: one furnished with drawers. Type A: Per Special Provision in the Proposal. Type B: five Type C: four Type B: five Type C: four Type D: one Type C: four Type D: one Type C: four Type D: one Type A: Per Special Provision included in the Proposal. Type B & C: 1, minimum dimensions 8 ft. by 2.5 ft. Type B: ten
Fire Extinguisher: Office Desks: Desk Chairs: Conference Table:	Type A, B & C: 2, multi-purpose (A, B, C), dry powder, minimum 5 lb. si Type D: 1, multi-purpose (A, B, C), dry powder, minimum 5 lb. size. Type A: per Special Provision included in the Proposal. Type B: five furnished with drawers. Type D: one furnished with drawers. Type A: Per Special Provision in the Proposal. Type B: five Type C: four Type B: five Type C: four Type D: one Type D: one Type D: one Type A: Per Special Provision included in the Proposal. Type D: one Type A: Per Special Provision included in the Proposal. Type B & C: 1, minimum dimensions 8 ft. by 2.5 ft. Type B: ten Type C & D: four



SECTION 698

Drafting tables	Type A: Per Special Provision included in the Proposal.
	Type B: 2, at least 6 ft. by 3 ft. -3 ", approximately 3 ft. high, with two drafting stools per table.
	Type D: 1, at least 6 ft. by 3 ft3in., approximately 3 ft. high, with two drafting stools per table.
Copier:	 desktop, letter and legal size, minimum of eight copies per minute, reduction and enlarging capability with supplies and maintenance.
File Cabinet:	1 four-drawer, or 2 two-drawer, fire resistant, legal size; inside dimension approximately 10 by 15 by 26" each, with lock(s) and key(s). The file shall bear an Underwriters Laboratories "C" Label - 350°F for one hour, inside surface.
Plan Rack or File:	Type A & B: two, for 2 by 3 ft. prints Type C & D: one, for 2 by 3 ft. prints

2.2.2.1 Desk chairs and drafting stools shall be 5 pedestal on wheels and adjustable with back support. All office furniture shall be in good, safe working order and condition.

2.2.3 The Contractor Shall Provide Additional Equipment as Required by the Special Provision Provided in the Contract Proposal.

2.2.4 The field office Type D shall also include the following testing equipment for determining gradation of gravels. This testing equipment shall be maintained in a satisfactory condition.

- (a) Balance: triple beam, at least 2000 grams capacity, sensitive to 0.1 gram, including carrying case.
- (b) Field scale: at least 70 lb. capacity, sensitive to 0.01 lb.
- (c) Hot plate or stove: two-burner, electric or bottled gas.
- (d) Sieves: set of U.S. Standard 8" brass, 2" high, consisting of one each No. 16 and No. 200 sieves, with pan and cover.
- (e) Shaker: motor driven, for 8" sieves.
- (f) Riddles: set of 16" wood, metal or plastic consisting of one each 3", 2", 1-1/2", 1", 3/4" and No. 4.
- (g) Canvas: heavy, 5 by 5 ft, for quartering samples.
- (h) Miscellaneous small tools and containers: shovels (one round pointed and one square pointed), assorted pans such as cake tins, and two pails.
- (i) Proctor mold: 4", capacity 1/30 ft³ (AASHTO T 99).
- (j) Proctor hammer: 5.5 lb, free fall of 12" (AASHTO T 99).
- (k) Straight edge: steel (1-1 /2 to 2 in wide), with a 12" beveled edge.
- (1) Moisture determination apparatus (Speedy Moisture Tester): calcium carbide type, 20 gram or 26 gram size.

2.3 Field laboratory equipment. The physical testing laboratory shall be provided with the scientific equipment required to perform physical tests for embankment compaction and grading, and for determining the suitability of the base course materials in conformity with standard AASHTO procedure. Following is a list of minimum equipment required to be maintained in a satisfactory condition for the use of the Engineer and the Contractor:

- (a) Proctor mold: 4", capacity 1/30 ft3 (AASHTO T 99).
- (b) Proctor hammer: 5.5 lb, free fall of 12" (AASHTO T 99).
- (c) Straight edge: steel (1-1/2 to 2 in wide), with a 12" beveled edge.
- (d) Balance: triple beam, at least 2000 grams capacity, sensitive to 0.1 gram, including carrying case.
- (e) Field scale: at least 70 lb. capacity, sensitive to 0.01 pounds.
- (f) Hot plate or stove: two-burner, electric or bottled gas.
- (g) Shaker: motor driven, for 8" sieves.
- (h) Sieves: set of U.S. Standard 8" brass, 2" high consisting of one each No. 4, 8, 16, 50, 100, and 2 each No. 40 and 200 sieves, with pan and cover.
- (i) Riddles: set of 16" wood or metal, consisting of sizes 3 in, 2 in, 1-1/2 in, 1 in, 3/4 in, 1/2 in, 3/8 in, and No. 4.
- (j) Canvas: heavy, 5 by 5 ft., for quartering samples.
- (k) Moisture determination apparatus (Speedy Moisture Tester): calcium carbide type, 20 gram or 26 gram size.
- Sieve shaker: mechanical, for gravel, (mounted outside and independent of the laboratory building) holding 18 by 24" tray including 2 in, 1-1/2 in, 1 in, 3/4 in and No. 4 screens.
- (m) Fire extinguisher: 1, multi-purpose (A,B,C) (dry powder) minimum 5 lb. size.
- (n) Graduate: 100 mL, plastic.

Go To =→ TOC Division 100 Division 200 Division 300 Division 400 Division 500 Division 600 Division 700 2016 NHDOT Standard Specifications



SECTION 698

- (o) Miscellaneous small tools and containers as necessary: Such as shovels (one round pointed and one square pointed), crowbar, pickaxe, 6" blade knife, sampling spoon, small trowel, measuring scoop, assorted pans similar to roasting pans and cake tins, and a floor broom.
- (p) Bench oven: electric, 110 volt, minimum volume 7.5 cubic feet.
- (q) Sample splitter: minimum chute width 1"

2.3.1 The laboratory shall be furnished with a heavy work table approximately 3 ft. high by 3 ft. wide and extending the length of the building. Suitable shelves and benches shall be provided as directed.

2.3.2 The laboratory shall be equipped with an elevated clean water tank having a minimum capacity of 275 gal which shall be supplied with potable water as directed. The tank shall be piped to a faucet at an approved sink within the laboratory.

2.3.3 To provide a suitable foundation for the mold to rest on when the AASHTO T 99 density test is being performed, a solid block of concrete approximately 18" deep, having a flat top approximately 1 ft. square shall be set practically flush in the ground at an approved location near the field laboratory.

2.3.4 This field laboratory and equipment is in addition to any other requirements specified in Sections Section 401 and 520.

2.4 Miscellaneous Office Supplies. In addition to the materials listed in 2.1, 2.2 and 2.3, upon written request the Engineer may require the Contractor to furnish miscellaneous office supplies such as field books, cross section paper, loose-leaf binders, etc., as appropriate.

Construction Requirements

3.1 Facilities.

3.1.1 Field offices and field laboratories shall be on the project, leveled and ready for use prior to the start of any operations. Acceptance of the physical testing laboratory will not be given until the equipment has been inspected and approved by representatives of the Bureau of Materials and Research. Testing equipment shall be calibrated by the Contractor in accordance with 106.03. These facilities shall be removed when the project is completed unless released earlier by the Engineer.

3.1.2 When field offices or field laboratories are to be placed on private property, the costs incidental to such placement shall be borne by the Contractor. Prior to Acceptance of the Work, the area shall be restored to the acceptance of the property owner and the Engineer. A written release from the property owner will be required.

3.1.3 Field offices and field laboratories shall not be combined, nor shall they be combined with the scale house or other similar structure.

3.1.4 Field offices and toilet facilities shall be for the exclusive use of Department personnel.

3.2 Maintenance, Service, and Utilities.

3.2.1 The Contractor shall furnish the following for a field office Type A, Type B, Type C, Type D or physical testing laboratory:

- (a) Fuel. Adequate supply for heating and testing operations.
- (b) Electricity. A 3,000 watt, 115-125 volt AC facility for each field office and field laboratory. Independent generators shall be provided where commercial power is not available.
- (c) Telephone. Telephone service, telephone and telephone message recorder shall be provided in the field office. Telephone service shall include a separate line for the telephone with 2 jacks one adjacent to the computer, a separate voice-grade, touch-tone dialing line for the computer modem, and a third voice-grade, touch-tone dialing line for the FAX machine. All necessary hardware and appurtenances for the computer modem shall be provided to the computer room, when a computer is supplied.
- (d) Sanitary. Toilet facilities as described in 2.1.5 shall be serviced and maintained in a sanitary condition.
- (e) Maintenance, including trash pickup and disposal.
- (f) First Aid Kit. Shall be maintained and restocked as necessary or as directed.
- (g) Access. Parking areas, including entrances and exits shall be adjacent to the field offices and maintained for year round access. This includes snow removal as long as field offices are occupied and preparing access areas so non-paved surfaces won't track in wet conditions.

3.2.2 The Contractor shall maintain all furnished equipment in good working condition and shall provide replacement or repair of equipment due to breakdown, damage, or theft. within two (2) working days of notice.

Method of Measurement

4.1 Field offices and Physical testing laboratory of the type specified and used on the project by the Engineer will be measured by the month, from the date each field office or physical testing laboratory is completely furnished and ready for occupancy, as

Go To =→ <u>TOC</u> <u>Division 100</u> <u>Division 200</u> <u>Division 300</u> <u>Division 400</u> <u>Division 500</u> <u>Division 600</u> <u>Division 700</u> 2016 NHDOT Standard Specifications



SECTION 698

determined by the Engineer, to the date that it is released back to the Contractor. Periods of less than one month will be computed at the rate of 1/30 of the unit price per month for each day of occupancy by the Engineer.

Basis of Payment

5.1 Payment for each accepted Field Office or physical testing laboratory, installed as specified, will be made at the corresponding Contract unit price per month. Such payment shall constitute full compensation for furnishing and erecting the field office or physical testing laboratory; for providing the specified utilities and maintaining the field office or physical testing laboratory and its equipment throughout the period of usage by the Engineer, including periods of project suspension and for restoration of the field office or physical testing laboratory is needed on the project.

5.1.1 The costs of all project related telephone service, including installation; monthly fees; taxes; any activation fees; internet access as specified; unlimited local calls; and toll calls up to \$300.00 per month shall be paid by the Contractor, subsidiary to the field office. The Department will reimburse the Contractor for any toll calls incurred by State personnel above \$300.00 per month as provided for in 109.04.

5.2 No payment will be made for periods of time in which the Contractor fails to comply with any of the requirements of this specification.

5.3 No payment will be made for time periods for which the Contractor fails to complete the Work on time as specified in 108.07.

5.4 The material cost of miscellaneous office supplies only, will be paid for as provided in 109.04. No payment for labor costs incidental to procuring these supplies will be authorized.

Pay items and units:

698.11	Field Office Type A	Month
698.12	Field Office Type B	Month
698.13	Field Office Type C	Month
698.14	Field Office Type D	Month
698.2	Physical Testing Laboratory	Month

Go To =→ TOC Division 100 Division 200 Division 300 Division 400 Division 500 Division 600 Division 700 2016 NHDOT Standard Specifications







Summary

Ohio

Of all the states listed here (other than West Virginia), Ohio has the most basic requirements and specifications for DOT trailers.

Their layouts follow the same pattern as many of the other states with three different types: Type A, Type B, and Type C. We'll be covering the details below, but you can find any other information on the Ohio Department of Transportation <u>website</u>.

ODOT Contact Form: <u>https://www.dot.state.oh.us/feedback/Pages/feedback.aspx</u>

ODOT Construction Projects Page: <u>Construction Projects Page link</u>

ODOT Phone Number: (614) 466-7170

Mailing Address: 1980 West Broad Street Columbus, OH 43223





Ohio has three DOT trailer types:

- Type A
- Type B
- Type C

The minimum ceiling height for all three types of DOT trailers in Ohio is **seven feet.** They also must have a minimum of **two telephones** with all the wiring and other accessories necessary to operate them.

Type A

The Type A field office in Ohio is the smallest of the three—it has a minimum floor space of **150 square feet**. It also requires a minimum of **four all-weather parking spaces**.



8' x 24' field office



Layouts

Type B

The Type B field office in Ohio is the middle size. This one has a minimum floor space of **500 square feet**, and a minimum of **eight all-weather parking spaces**.





Type C

The Type C field office in Ohio is the biggest size, with a minimum floor space of **1,000** square feet. To be classified as Type C, the field office must also have a minimum of **10 all-weather parking spaces**.



24' x 64' temporary building





Note: This section is a reproduction of the current ODOT requirements for field offices. For more information, consult the Ohio Department of Transportation Website.

Item 619 FIELD OFFICE

619.01 Description.

This work consists of providing, maintaining, and subsequently removing a field office for the exclusive use of the Department for the duration of the Contract at a location approved by the Engineer.

619.02 General.

Furnish a completely functional field office of the type specified in the Contract by the date directed by the Engineer.

Furnish each field office with a means for maintaining a room temperature between 68 and 80 °F (20 and 27 °C).

Furnish electric service for each field office.

Furnish potable hot and cold water for each field office.

Furnish neat, sanitary, enclosed toilet accommodations for each field office. Furnish associated lavatory and sanitary supplies. Portable facilities may be provided with the approval of the Engineer.

For projects requiring moisture and density control of construction materials, provide the field office with a lockable wood or metal storage box of sufficient size to store a nuclear density gauge and an electrical connection for the gauge.

For the type of field office specified, provide the items indicated in Table 619.02-1



TABLE 619.02-1 FIELD OFFICE Item Type B Type C Type A Minimum ceiling height, ft (m) 7 (2.1) 7 (2.1) 7 (2.1) 500 (46) 1000 (93) 150 (14) Floor space, ft^2 (m²) Separate enclosed room, ft^2 (m²) 0(0) 0(0)100 (9) (Part of specified floor space) 2 2 2 Telephone service & telephones^[1] 1 1 Internet service connection [6] 1 1 Facsimile machine 1,11x17 Copying machine^[2] $1.8 - 1/2 \times 14$ 1.11x17 1 Base radio & 4-hand held units^[3] ------1 2 3 Calculator with tape 1 3 5 Desk and chair set 2 Work table, 30 ' 72-inch 1 3 (750 [~]1800 mm) 1 2 4-drawer, legal size, lockable metal file cabinet ---2 2-drawer, metal file cabinet 2 1 1 2 Portable fire extinguishers^[4] 1 Plan rack^[5] 1 1 2 All-weather parking spaces 4 8 10 [1] For each telephone specified, provide the telephone itself, all wiring necessary to connect the phone and computers or fax machines to the phone company system, and a working separate phone number for each telephone. Connect one phone to a recorded answering device. For Types B and C, provide one speakerphone. [2] Capable of producing multiple copies of documents of the size designated; provide the copier with all necessary maintenance and paper supplies. [3] Capable of transmitting and receiving voice communication between office and any area on the project site. [4] Type 2-A:10-B:C, 5-pound (2.27 g) size [5] Capable of handling the breakdown of 22 ´ 34-inch (559 ´ 864 mm) sized plans in to ten sections. [6] Provide a broadband internet connection capable of download speeds greater than 1.5 Mbps. If 1.5 Mbps is not available, provide the highest speed available in the area.



47

Ohio

With the Engineer's written approval, the Contractor may modify the requirements for the field office.

Maintain all utility services (e.g., electric, security, telephone, water) for the duration of the project.

Furnish a concrete cylinder curing box capable of holding at least eight 6 x 12 inch (150 x 300 mm) cylinders at 73 °F (23 °C) +/- 3 degrees no matter what the ambient temperature is when constructing either portland cement concrete pavement over 10,000 square yards (8000 m2) or over 50 cubic yards (38 cubic meters) of bridge structure repair or replacement concrete. The box will have a sealed lid.

619.03 Method of Measurement.

The Department will measure Field Office, Type ___ by the number of months the office is maintained. A partial month at the end of the project will be paid as a full month.

619.04 Basis of Payment.

The Department will pay for accepted quantities at the contract price as follows:

Item
Unit
Description
Month
Field Office, Type



Ohio

Pennsylvania

Basic Information

Summary

Of all the states listed in our guide, Pennsylvania has some of the most complex specifications and requirements for DOT trailers and field offices. In fact, they have **five types** that also include specifications for field laboratories and plant offices.

We've listed everything below, and you can always find more information on the Pennsylvania Department of Transportation <u>website</u>.

PennDOT Regional Offices Page:

https://www.penndot.pa.gov/RegionalOffices/Pages/default.aspx

PennDOT Construction Registration Page:

Construction Registration Page link

PennDOT Phone Number: (717)-412-5300

Mailing Address: Keystone Building 400 North St Harrisburg, PA 17120





The state of Pennsylvania splits its field office designations into five layouts:

- Type A
- Type B
- Type C
- Proportioning Plant Office
- Field Laboratory

Type A

The Type A field office in Pennsylvania is the largest, with a minimum floor space of **1,300 square feet.** Additionally, it must have **six individual partitioned rooms.**



24' x 64' temporary building



Layouts

Type B

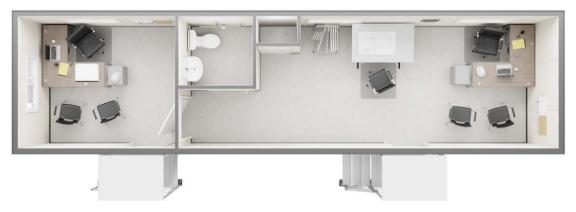
The Type B field office in Pennsylvania has a minimum floor space of **650 square feet.** It also must have **three individual partitioned rooms.**



12' x 64' field office

Type C

The Type C field office in Pennsylvania has a minimum floor space of **240 square feet.** It also must have **two individual partitioned rooms.**







Layouts

Proportioning Plant Office

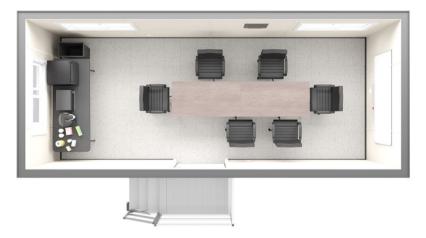
The Proportioning Plant Office designation in Pennsylvania must have a minimum floor space of **150 square feet.** It only requires **one individual partitioned room.**



8' x 24' field office

Field Laboratory

The Field Laboratory designation in Pennsylvania must have a minimum floor space of **150 square feet.** Like the Proportioning Plant Office, the Field Laboratory only requires **one individual partitioned room.**









Note: This section is a reproduction of the current PennDOT requirements for field offices. For more information, consult the Pennsylvania Department of Transportation Website.

609.1

609.2(a)

SECTION 609—INSPECTOR'S FIELD OFFICE AND INSPECTION FACILITIES

609.1 DESCRIPTION—This work is furnishing, setting up, maintaining, and removing a field office of the type indicated and, if indicated, a field laboratory, proportioning plant office, and/or equipment package for the exclusive use of Department personnel. If Section 609 is excluded or waived from the contract, the requirement for providing sanitary facilities, as specified in Section 107.06, are not waived.

609.2 MATERIAL-

(a) General. Provide offices and laboratories having the minimum floor space specified, along with all required furnishings, equipment, and materials. Furnish office and laboratory facilities conforming to applicable occupational safety and health regulations, including, but not limited to, those governing sanitation, illumination, ventilation, means of egress, medical services and first aid, and fire protection. Ensure that offices and laboratories have at least 7-foot ceilings, locking windows, adequate electric lighting, an adequate number of storage cupboards and closets, a mail slot or drop box, and a private entrance secured with lock and key. Ensure that stairway systems installed for access to offices and laboratories include a handrail and non-skid treads. Provide systems to heat and cool interior spaces, as necessary, to maintain an ambient temperature between 65F and 75F. Maintain acceptable sanitary toilet facilities, for exclusive use by Department personnel, near or within offices and laboratories. Ensure that the number of sanitary toilet facilities furnished is sufficient based on the size of the Department inspection staff that will likely be stationed in the indicated office or laboratory. Maintain acceptable lavatory (wash-up) facilities near or within sanitary toilet facilities. If the field office is located in an existing building ensure that lavatory facilities are equipped with hot and cold (or tepid) running water: hand soap or similar cleansing agents; and clean, sanitary, cloth or paper hand towels or warm air blowers. If a construction trailer is used as a field office, ensure that a sanitary toilet facility is located near the field office, for quick access, and ensure that it is equipped with waterless hand soap or hand sanitizer. Provide a clean electrical power source (not derived from a portable generator) with sufficient capacity to allow unrestricted operation of all indicated electronic systems, appliances, and equipment. Furnish documentation certifying that indicated equipment requiring calibration has been calibrated within the last 12 months, and continue to have such equipment recalibrated annually for the duration of the project. If required furnishings and/or equipment being provided have been previously used, ensure that such items are in satisfactory condition and fully functional as of the scheduled start of work. Whenever practical, obtain maintenance agreements for communications, electronic, and/or specialized equipment that provide for on-site repair service. If malfunctioning equipment cannot be repaired on site, provide a replacement within a 24 hour time frame based on the relative importance of the piece to the timely performance of required project management functions as determined by the Representative.

1. Inspector's Field Office. Set up the indicated field office in an acceptable weatherproof building or trailer. Situate the field office in an acceptable location on or in the immediate vicinity of the project, separate from other construction offices. For field offices where multiple individual partitioned rooms are indicated, submit a floor plan showing the layout of the interior space for approval. Equip the field office according to Table A.

2. Proportioning Plant Office. If indicated, provide an office at the proportioning plant. Set up the indicated plant office in an acceptable weatherproof building or trailer. Equip the office according to Table A.

3. Field Laboratory. If indicated, provide a laboratory for materials and soils testing. Set up the indicated field laboratory in an acceptable weatherproof building or trailer situated in an acceptable location. Supply a gravity or pressure potable water system having at least a 100-gallon capacity and connected to a service sink with a faucet and acceptable outside drain. Do not drain or discharge wastewater into the surrounding environment; use a container of sufficient size to collect all drained or discharged wastewater and transport and dispose of wastewater at an approved site for handling such wastewater. Equip the field laboratory according to Table A.

4. Nuclear Gauge Temporary Storage. If indicated, provide a temporary storage location within the Inspector's Field Office or Field Laboratory for temporary storage of moisture density nuclear gauges by a Department Representative. Provide a temporary storage location consisting of an enclosed closet with a minimum area of 9 square feet and secured with two independent locks and keys. Provide all keys to only the licensed Department nuclear gauge operator. Do not provide keys to any other persons. Where possible, locate the closet at least 20 feet from a

609 – 1 Change No. 5



609.2(a)

609.2(c)

permanent workstation (i.e., desk area). Where a 20 feet minimum distance from a permanent work station is not reasonably possible, the Department licensed nuclear gauge operator will temporarily store the nuclear gauge within the storage location following current Department policy and procedures to prevent radiation exposure to the public.

(b) Testing Equipment. On projects where a Field Laboratory is indicated, furnish and maintain the following equipment for required testing of soil or aggregates:

Number of Each	Equipment		
1	C.A. Mechanical Sieve Shaker with Timer		
1	F.A. Mechanical Sieve Shaker with Timer		
1	Set Standard Sieves for C.A.		
1	Set Standard Sieves for F.A. and Soils		
1	Unit Mass (Weight) Metal Container 1 cubic foot		
1	Unit Mass (Weight) Metal Container 1/2 cubic foot		
1	Platform Scale, 200-pound capacity, sensitive to 0.01 pound		
1	Balance, 70.5-ounce capacity, sensitive to 3.5x10 ³ ounce, with one complete set of Masses (Weights).		
1	Exhaust Fan (for venting Mechanical Shakers)		
1	Density Sample Extruder		
1	Proctor Mold and Rammer		
1	12-inch Steel Straightedge		
2	Mixing/Drying Pans		
1	Mixing Spoon		
1	Broom & Dust Pan		

In addition, on projects where a Field Laboratory is indicated and cement concrete, asphalt concrete, and/or construction aggregates are to be used; furnish and maintain the equipment specified in Section 704.2(a), in the plant requirements of Bulletin 27, and/or in Sections 703.1(b) and 703.2(b), respectively.

When specified, provide an on-site cylinder breaking testing machine conforming to PTM No. 604 for use by Contractor's certified technicians and Department personnel to determine the compressive strength of molded concrete cylinders. The testing machine is to be calibrated annually, every time it is moved to a new location, immediately after making repairs or adjustments which may affect the operation of the system, and whenever there is any reason to doubt the accuracy of the testing machine.

(c) Communications Equipment. When indicated, provide the communications equipment specified in the proposal. Furnish communications equipment in the quantity indicated and meeting the following requirements:

1. High Capacity Multifunctional Device (MFD): Copier, Scanner, Fax, and Printer. A Windows 10 compatible network enabled digital color laser copier, with automatic document feeder, having reduction/enlargement functions capable of accepting maximum 11-inch by 17-inch size originals and producing 11-inch by 17-inch size copies at a minimum rate of 45 letter size copies per minute. Device will have three paper drawers to accommodate letter, legal, and tabloid paper sizes. Include sufficient imaging cartridges (toner/drum/developer) to yield a minimum of 5,000 copied pages, as well as printer driver software to install on the computer devices. Device will have air print (wireless) capability. During the removal of the high capacity MFD, from the field office, reset the device back to factory settings in the presence of the Inspector-in-Charge. Remove the internal hard drive from the high capacity MFD and surrender to the Inspector-in-Charge. Complete and submit Form CS-101B to the Inspector -in-Charge.

2. Low Capacity Multifunctional Device (MFD): Copier, Scanner, Fax, and Printer. A Windows 10 compatible network enabled digital color inkjet copier, with automatic document feeder, having reduction/enlargement functions capable of accepting maximum 11-inch by 17-inch size originals and producing 11-inch by 17-inch size copies at a minimum rate of 35 letter size copies per minute. Device will have two paper drawers to accommodate letter, legal, and tabloid paper sizes. Include sufficient imaging cartridges (toner/drum/developer) to

609 – 2 Change No. 5



609.2(f)

yield a minimum of 5,000 copied pages, as well as printer driver software to install on the computer devices. Device will have air print (wireless) capability.

(d) Specialized Equipment. When indicated, provide the specialized equipment specified in the proposal. Furnish specialized equipment in the quantity indicated and meeting the following requirements:

1. Surveyor's Level and Measuring Rod. A standard, waterproof, surveyor's leveling instrument having, as a minimum, 20x magnification and a sighting range of up to 200 feet; with a job accuracy range within 1/4 inch at 75 feet. Include a 25-foot minimum, fiberglass measuring rod, folding leg tripod, rain cover, and carrying case.

2. Electronic Digitizer. A stationary or portable, high performance digitizer system capable of electronically measuring the exact, net area and perimeter of linear shapes on plan drawings at any scale, and converting those measurements to areas and volumes. Furnish electronic digitizer having a tablet with a minimum 22-inch by 36-inch active area. Include necessary cabling, carrying case, and all other operating essentials.

3. Digital Display Level. A durable level with automatic calibration function, that reads angles with precision and digitally displays readings in degrees, percent slope, and pitch to within 1/10 degree accuracy. Include battery(ies).

4. Infrared Thermometer. A hand-held, portable, non-contact thermometer capable of measuring temperatures between -4F and 482F and with a field of view (i.e., spot ratio) of at least 6:1. Include protective case, battery(ies) and all other operating essentials.

5. Laser Range Finder. A self-contained, light-weight, hand-held instrument that measures and records distances in feet, yards, or meters; having a maximum range of 750 feet to an uncooperative, non-reflective target; Liquid Crystal Display (LCD); and shock/water resistant housing. Include battery(ies), cabling, carrying case, and all other operating essentials.

6. Paper Shredder. Lightweight, crosscut shredder capable of shredding 10 sheets at one time.

(e) Internet Service. For each type field office indicated, purchase a subscription to a wired broadband Internet Service, for exclusive use by Department personnel, for the duration of the project. Provide high-speed wired broadband internet access, with a minimum connection of 10 Megabits per second (Mbps), by means of a Fiber, Cable or Digital Subscriber Line (DSL). Provide a wireless broadband router, with a minimum security setting of Wifi Protected Access II (WPA2), to connect to the provided wired broadband, to be managed by Department IT. Based on the specific type of high-speed connection provided, furnish a compatible modem with built-in hardware firewall protection. Purchase a separate internet service subscription for the Proportioning Plant Office, if indicated, as specified in Section 609.2(e).

If such high-speed wired broadband connection is not attainable within the area where the project office is located alternate internet connectivity with a minimum connection of 10Mbps options must be submitted to the District IT Administrator for review and acceptance.

Demonstrate connectivity with the internet service provider at the time of or immediately following microcomputer system installation.

(f) Miscellaneous Materials. For each microcomputer system that will be used on the project, as indicated in the proposal, at a minimum provide the following:

- Two (minimum), Memory Flash Drives 32 Gigabytes (GB) (minimum), encrypted to meet 2048-bit (minimum).
- 8 1/2 -inch by 11-inch and 8 1/2-inch by 14-inch, and 11-inch by 17-inch 20# white bond paper for copiers
 and printers, as specified, sufficient for the life of the project. Providing only one ream of paper at a time is
 unacceptable.

All miscellaneous material become Department property.

609 – 3 Change No. 5



609.3

609.4(a)

609.3 CONSTRUCTION-Install the indicated facilities no later than 5 working days after the Notice to Proceed Date or 5 days before the scheduled start of work. Anchor the facilities to withstand high winds. Maintain the facilities from installation until 30 days after physical work (including completion of punch list items identified during the final inspection) has been completed, unless released earlier by the Representative. Clean or arrange for the indicated facilities to be cleaned at least once per week. Arrange for the weekly pick up and disposal of trash and recyclables including, but not limited to, paper, plastic, and ink/toner cartridges. Provide an adequate number of accessible parking spaces immediately adjacent or in close proximity to the offices or laboratory for exclusive use by Department personnel. Provide proper maintenance of parking areas. Ensure that there is sufficient lighting to illuminate the exterior of offices or laboratory and all parking areas. Designate a specific individual to serve as the contact person for service-related problems. After physical work has been completed, but before release by the Representative, arrange to meet with the Inspector-in-Charge to examine and determine the condition of all specialized equipment that is contractor-owned. Report all unresolved disputes over the condition of such equipment to the Representative. Failure to meet with the Inspector-in-Charge or to report problems with the condition of specialized equipment will create a presumption that, except for expected wear resulting from normal usage, the equipment is in good condition and remains fully functional. Specialized equipment that is lost or determined to be damaged beyond repair will be replaced or reimbursement will be made as specified in Section 110.03, provided such loss or damage is not the result of carelessness or negligence on the part of the Contractor or any other responsible third party.

The Representative may direct that the office or laboratory facilities and equipment package be maintained for more than 30 days after the date of physical work completion due to the Contractor's failure to submit, complete, and/or correct required certificates or documents, as established during the final inspection.

609.4 MEASUREMENT AND PAYMENT-Lump Sum

The proposal will include separate pay items for the Inspector's Field Office and Inspection Facilities, Field Laboratory, Proportioning Plant Office, and Equipment Package, as applicable.

Each contract item will be paid, as specified in Section 110.05, in two equal payments, according to the following schedule:

- When work is completed in an amount equivalent to at least 10% of the original contract amount, excluding the bid price for the applicable item, the first payment will be made.
- When work is completed in an amount equivalent to at least 60% of the original contract amount, excluding the bid price for the applicable item, the second payment will be made.

(a) Price Adjustments. Adjustments to the lump sum prices bid for the indicated office or laboratory facilities and equipment package, as applicable, will be made as follows:

1. Time Extensions and Reductions. In the event the time for completion of all work on the project is extended or reduced, as specified in Section 108.06, an appropriate adjustment (payment to the Contractor or rebate to the Department) will be made to the lump sum prices bid for the indicated office or laboratory facilities and equipment package, as applicable, for the days in excess of (payment) or less than (rebate) the original contract time, at the following daily rate:

Daily Price Adjustment Rate = <u>75% x Contract Lump Sum Price</u> Original Contract Time in Days

2. Facilities Maintained for More than 30 Days After Physical Work Completion. In the event the Representative directs that the office or laboratory facilities and equipment package be maintained for more than 30 days after the date of physical work completion, as specified in Section 609.3, an appropriate adjustment (payment to the Contractor) will be made to the lump sum prices bid for the indicated office or laboratory facilities and equipment package, as applicable, for the days in excess of 30 until released by the Representative, at the Daily Price Adjustment Rate specified in Section 609.4(a)1.

No adjustment will be made if the Representative directs that the office or laboratory facilities and equipment package be maintained for more than 30 days after the date of physical work completion due to the Contractor's failure to submit, complete, and/or correct required certificates or documents, as established during the final inspection.

609 – 4 Change No. 5



609.4(a)

609.4(a)

	TABLE A				
Offic	Office/Laboratory and Standard Equipment				
	Type A Field Office	Type B Field Office	Type C Field Office	Proportioning Plant Office	Field Laboratory
Floor Space square foot, out to out	1,300	650	240	150	150
Individual Partitioned Rooms	6	3	2	1	1
Conference Table & Chairs	1				
Desk(s) & Chair(s)	6	3	2	1	1
Office Chairs	15	9	6		
Plan Rack(s)	2	2	2		1
Work Table(s) (1)	5	3	2	1	1
Printer Stand(s) (2)	5	3	1		
4-Drawer File Cabinet ⁽³⁾	4	3	2	1	1
2-Drawer File Cabinet ⁽³⁾	2	1	1		
Sample Splitter (4)					1
Range (5)					1
Sanitary Electric Water Cooler	1	1	1	1	1
Individual Access Phone Line(s) (6)	4	4	4	3	
Surge Protectors (7)	6	4	4		
Telephone(s) w/ Answering Machine(s) or Voice Mail	2	2	2	1	

(1) Work Table. Minimum size: 2 1/2 feet by 7 feet by 2 1/2 feet high.

(2) Printer Stand. Specifically designed to accommodate laser and color printers, with paper storage/feeder tray. Minimum size: 18 inches by 18 inches by 2 1/2 feet high.

(3) File Cabinets. Fire resistant (D-Label), lockable, metal file cabinet.

(4) Sample Splitter. For coarse and fine aggregate, with adjustable chute opening.

(5) Range. Standard, 36-inch range, gas or electric, new or used, with oven capable of operating at $230F \pm 9F$.

- (6) Individual Access Phone Line(s). The number indicated includes the phone line(s) needed for microcomputer system operation and Internet service.
- (7) Surge Protector. A minimum of six AC outlets and one telephone outlet, with a 6 foot minimum length cord, having a line voltage regulator/conditioner that protects against chronic high voltage, voltage spikes, and radio frequency interference.





609.4(a)

609.4(a)

Appendix TABLE A EQUIPMENT PACKAGE			
Communications	s Equipment		
High Capacity MFD ⁽¹⁾			
Low Capacity MFD			
Specialized E	quipment		
Surveyor's Level & Measuring Rod			
Electronic Digitizer			
Digital Display Level			
Infrared Thermometer			
Laser Range Finder			
Paper Shredder			
Internet S	ervice		
Internet Service Provider	Yes/No		
Wireless Internet Broadband Router ⁽²⁾	Yes/No		
Miscellaneou	us Items		
Computer Media	Yes/No		
High Yield MFD Ink/Toners Cartridges	Yes/No		
Laboratory E	quipment		
Concrete Cylinder Testing Machine			

* The special provision will be included in the proposal indicating the quantity of each type of communications, electronic, and/or specialized equipment to be furnished.

- 1. Unless otherwise approved, furnish a multifunction device in lieu of a separate copier, laser printer, color printer, scanner, and fax.
- Provide compatible, powered internet hardware with firewall protection capable of wireless WPA2 security internet service and eight hardwired network ports, and pre-shared key. All cabling needed to interconnect network hardware and all microcomputer systems are required.

Microcomputer Systems. This information is being provided to assist Bidders in meeting the requirements as specified in Section 609.2(c), Communications Equipment, Section 609.2(e), Internet Service, and Section 609.2(f), Miscellaneous Materials. The special provision in the proposal will indicate the total number of microcomputer systems that will be used on the project.

Microcomputer systems may be furnished by the Department. If microcomputer systems are to be furnished by the Contractor, as part of the construction Contract, the bid will include applicable, 0688-XXXX bid items. When indicated, furnish microcomputer systems meeting the requirements as specified in Section 688.





Rhode Island

Basic Information

Summary

Rhode Island has an extensive list of specs and requirements for field offices—much like Connecticut. However, just like Vermont, Rhode Island doesn't have different types of field offices. Instead, their specifications encompass all field offices in the state.

If you're looking for more information on the Rhode Island specifications, you can find them on the Rhode Island Department of Transportation <u>website</u>.

RIDOT Constituent Services Page: https://www.dot.ri.gov/about/help.php

RIDOT Phone Number: (401) 222-2450

RIDOT Mailing Address:

Rhode Island Department of Transportation Two Capitol Hill Providence, RI 0290



Layouts

The one field office layout used in Rhode Island must have a minimum of **550** square feet of floor area, at least three rooms, and seven feet minimum of headroom—unless specified otherwise in the Special Provisions of the Contract. It also must have a sufficient amount of windows to provide at least 27 square feet of natural light.

30



12' x 64' field office



Rhode Island

DI

BRIQUES

UT

Licm SUR



Note: This section is a reproduction of the current RHDOT requirements for field offices. For more information, consult the Rhode Island Department of Transportation website.

SECTION 929

FIELD OFFICES AND MATERIALS LABORATORY

929.01 DESCRIPTION. This work consists of providing and maintaining an adequate weatherproof and ADA compliant field office or materials laboratory for the exclusive use of the Engineer and his 9–55

9-55

staff during both the contract period and approximately 180 days thereafter, all in accordance with these Specifications.





929.02 GENERAL REQUIREMENTS.

929.02.1 Location. The field office or materials laboratory shall be located on a site that is both satisfactory to the Engineer and convenient to the project site.

929.02.2 Minimum Spatial Requirements. Unless specified otherwise in the Special Provisions of the Contract, the Engineer's field office or materials laboratory each shall contain a minimum of 550 square feet of floor area, at least 3 rooms, and 7 feet minimum of headroom. It shall contain a sufficient number of windows to provide at least 27 square feet of natural light.

Existing building structures meeting the above minimum requirements are considered acceptable.

929.02.3 Other Requirements.

a. The Contractor shall be responsible for arranging and complying with all necessary local and State regulatory permits and inspections, including all costs associated therewith.

b. The Engineer's field office or materials laboratory shall be fully equipped, operational and ready for occupancy at least two (2) weeks prior to the start of actual construction operations.

c. The Contractor shall protect the field office and/or materials laboratory against fire, flooding, and theft throughout the 24 hours of every day the unit is in service. The Contractor shall be responsible for the loss of any property belonging to the State that is housed therein due to theft, fire, or natural causes.

d. At the time either the field office or materials laboratory is made available to the State, the Contractor shall furnish evidence to the Engineer that adequate insurance has been obtained which protects the State against loss of property from theft, fire, or natural causes.

In the event of fire, theft, or equipment breakdown, all equipment involved shall be repaired or replaced by the Contractor as soon as possible. In the event the field office or materials laboratory is destroyed or rendered untenable for any reason, it shall be replaced by the Contractor within two weeks, or as directed.

929.02.4 ADA Considerations. The Department is committed to providing equal access and opportunity for all persons in conjunction with Federal Law under Title I of the American's with Disabilities Act (ADA).

The United States Access Board defines a reasonable accommodation as; "a modification or adjustment to a job, an employment practice, or the work environment that makes it possible for a qualified individual with a disability to enjoy an equal employment opportunity."

In keeping with these directives, the Department will ensure that construction field offices will be accessible to anyone with a disability, and will also ensure that reasonable accommodation in a manner consistent with the ADA will be made to allow Department employees to be productive and efficient members of the Department's workforce.



Personnel may contact the Department's Human Resources Office with any reasonable accommodation requests.

929.03 SPECIFIC REQUIREMENTS. The field office and/or materials laboratory shall be provided for as follows:

929.03.1 Outside Utilities.

a. Electrical Power. The Contractor shall arrange for electrical service for the field office or materials laboratory and provide the necessary meter connections, fuse box and switches as required by the power company, all in accordance with State and local building codes. The power supply shall be 115-volt, 60-cycle current of sufficient amperage to provide for heat, interior and exterior lighting, operating office equipment and air conditioning.

b. Sanitary Sewer Outfall. The Contractor shall provide an adequate temporary outfall into either the municipal sanitary sewer system or an individual sewage disposal system that has been approved by the R.I. Department of Environmental Management. Disposal of sanitary wastes must conform to the applicable requirements of both the R.I. Department of Environmental Management and municipal regulations.

c. Security. All office or laboratory trailer units shall be enclosed within a 6-foot chain link fence with adequate gates and locks. Outside area floodlighting, together with appropriate timers, shall be provided on all four sides of trailers.

929.03.2 Interior Utility Services.

a. Lighting. Lighting fixtures required to provide a minimum illumination of 70 foot-candles in all areas.

b. Electrical receptacles. Duplex electrical receptacles shall be provided as required in the State Building Code and as directed by the Engineer. At least ½ of these receptacles shall be 20-amp capacity.

c. Heating and Air Conditioning. Heating and cooling equipment capable of maintaining a year round temperature between 68°F and 78°F shall be provided.

d. Sanitary Facilities. A water closet, lavatory, slop sink, vent fan, and a hot water heater of a minimum 5-gallon capacity shall be provided.

e. Telephone. Telephone service and instruments for two (2) incoming phone lines shall be provided.

The Contractor shall also provide and install 4 additional phone jacks, required wiring, and phones to be located throughout the field office at the locations specified by the Engineer.

f. Network Internet Service. The Contractor shall provide and install a secure high-speed internet service capable of interconnecting and networking a combination of 8 computers, printers, copiers, and scanners, compatible with the equipment specified in Special Provision 929.1000.



A A

929.03.3 Doors and Windows. Doors shall be stock sizes and shall have a key-in-knob lock of an approved manufacturer. All doors shall be keyed alike. All windows shall be operative except for picture windows. Operative windows shall be either double hung or casement type equipped with adequate locks. All windows shall be provided with either shades or venetian blinds. All window openings shall be adequately screened. Windows in sanitary areas shall have frosted glass.

929.03.4 Furnishings and Equipment. Both the field office and materials laboratory will be provided with the following:

- a. Furnishings.
- 1. One work table, 30 inches high, with a minimum of 24 square feet of work area.
- 2. One drafting stool.
- 3. Two folding-type chairs.
- 4. One fire resistant drawer-type safe, legal size, with combination or key lock.
- 5. One four-drawer legal size metal filing cabinet equipped with lock.
- 6. Two two-drawer (141/2" x 16") metal filing cabinets.
- 7. Two round wastebaskets.
- 8. One plan rack of an approved design to be equipped with 10 rods.
- b. Equipment.

1. A 5-pound CO_2 fire extinguisher of approved manufacture shall be furnished for each 200 square feet of floor area.

2. A 115-volt, 60-cycle rotating fan.

3. One First-Aid Kit.

 One electric sanitary water cooler with refrigerated storage compartment; supply with paper cups.

5. Toilet paper holders, paper towel dispensers and soap dispensers in the toilet rooms.

929.03.5 Special Requirements for Field Office. The field office will also be provided with the following:

a. Furnishings.

1. Three office type desks, minimum top dimensions 32" x 60", with two or more drawers on each side.

2. Three swivel desk chairs.





- b. Equipment.
- 1. Two fully automatic electronic calculators with tape.
- 2. One electric typewriter, with ribbon as required, mounted on typewriter table on casters.
- 3. One office type copying machine.
- 4. One pencil sharpener.

c. Computer Equipment. The items of computer equipment and software to be furnished, installed, tested, made operational and maintained within the Field Office are set forth in Special Provision Code 929.1000.

Failure to furnish, install, make operational and maintain the field office equipment and peripheral equipment/accessories specified under **Subsection 929.03.5**, will result in delay to the processing of progress payments.

929.03.6 Special Requirements for Materials Laboratory. The materials laboratory will also be provided with the following:

a. Furnishings.

1. One office type desk, minimum top dimensions 32" x 60", with two or more drawers on each side.

2. One swivel desk chair.

b. Work Table and Sink. The materials laboratory shall be provided with a deep sink set in a work table, and equipped with a faucet and a drain to the outside of building. A water supply sufficient for testing shall be provided. The water supply may consist of a gravity feed tank with at least a 50-gallon capacity or be provided from municipal sources.

c. Concrete Curing Box. A concrete cylinder curing box shall be provided and shall conform to the following minimum requirements: approximate internal dimensions of 54 inches in length; 18 inches in width; and 17 inches in depth. The box shall be insulated, hinged at the back and with a lock at the front. The box shall be made of a durable, rust proof material with a moisture-proof seal between the lid and the box. The box shall be leak-proof and be able to hold a pool of water at the bottom of the container approximately 4 inches deep. A drainpipe shall be provided through the side of the box for maintenance purposes. Suitable means of support shall be provided to hold the concrete cylinders above the water surface. A thermometer which can be read from the outside shall be installed to measure the internal temperature of the box. A thermostat shall maintain the water at a uniform temperature of $73^{\circ}F \pm 3^{\circ}F$ using heating or cooling cycles throughout an ambient temperature range of $-10^{\circ}F$ to $100^{\circ}F$.

1. Equal Characteristics. A concrete curing box of a design and manufacture different from that described above, but which possesses equal characteristics may be employed provided that it is approved in writing by the Engineer.

d. Equipment. The Contractor shall provide the materials laboratory with the following additional equipment.





1. One Gilson Testing Sieve Shaker (Model TS-1), or equivalent, consisting of ten changeable screens mounted on a concrete base. Screens shall be calibrated to U.S. Standard tolerances and shall consist of the following sizes: 3", 2½", 2", 1½", 1", 3/4", ½", 3/8", No. 4, No. 8, and pan.

2. One motor-driven sieve shaker for operation on 115-volt, 60-cycle single phase current complete with belt- driven mechanism to produce combination rocking and tapping action, and with capacity for 8 full height sieves plus pan and cover; all parts mounted on a sturdy base.

3. One set of brass-frame United States Standard testing sieves, all to be full height, 8 inches in diameter, matched for nesting, and consisting of the following sizes: $\frac{1}{2}$, $\frac{3}{8}$, Nos. 4, 8, 16, 40, 50, 100, two No. 200 mesh sieves, each with No. 14 mesh backing, two pans and one cover.

4. One two burner electric hot-plate; UL approved.

5. Eight drying pans (10" x 14" x 2" minimum) of sturdy 12-gauge metal.

One approved digital scale with a minimum capacity of 2,000 grams and with sensitivity of 0.10 gram.

7. One platform beam scale, with pan that can be tared on scale capacity 200 pounds, sensitivity of 0.01 pound, with two beams at front of platform, reading the 20 pounds by single pounds and to 1 pound by 0.01 pounds with additional hanger weights to fulfill capacity of 200 pounds; all parts to be steel with enclosed weighing mechanisms: platform to be 12½" x 14".

8. Scales must be calibrated every six months and must conform to the requirements of applicable Specifications and Standards.

e. Hardware and Accessories. The following hardware and accessories shall be provided:

1. One sample splitter 1/2-inch chute width - 16 chutes.

2. One sample splitter 2¹/₂-inch chute width - 8 chutes.

- 3. One brass-wire briquette brush.
- 4. Three, one-inch sieve or sash brushes (fine).
- 5. One rubber mallet.
- 6. One large sampling spoon.
- 7. One large scoop.
- 8. One trowel.
- 9. One square shovel.





10. One spade shovel.

11. Two pairs insulated gloves, "Hot Mitts", as required.

12. One thermometer - Gardo Model GT-300-R or equivalent, having an operating range of 0°F to 220°F with 6-inch stem and 3-inch diameter dial face, with calibrating capabilities.

13. One thermometer - Gardo Model GT-300-R or equivalent, having an operating range of 50°F to 500°F with a 9-inch stem and 3-inch diameter dial face with calibrating capabilities. The head should be capable of withstanding temperatures of at least 360°F.

929.03.7 Maintenance and Custodial Service. The Contractor shall provide the following maintenance and custodial services.

a. Maintenance. All necessary repairs of damaged, defective, or vandalized parts of the field office or materials laboratory and their associated furnishings and equipment. Maintenance operations shall continue as long as the field office or materials laboratory is occupied by the Engineer.

b. Custodial.

- 1. Weekly trash removal.
- 2. Bi-weekly floor cleaning.
- 3. Bi-monthly window cleaning.
- 4. Snow plowing, sanding and removal of snow at parking areas and walks.
- 5. Replacement of supplies as required to maintain office equipment and sanitary facilities.

929.03.8 Project Sign. Both the field office and the materials laboratory shall be equipped with a sign for the purpose of identifying the use of the structure and providing notice against trespassing. The Field Office Identification Sign is detailed in the RI Standard Details.

929.04 METHOD OF MEASUREMENT. "Field Office" and "Materials Laboratory" will both be measured by the number of calendar months said facilities are used under the Contract.

929.05 BASIS OF PAYMENT. "Field Office" and "Materials Laboratory" will be paid for at their respective contract unit prices per month as listed in the Proposal. The prices so-stated constitute full and complete compensation for furnishing, maintaining, and subsequently removing the field office or materials laboratory, together with all associated costs of computer equipment and peripherals and supplies, facsimile modems, including all costs associated with electrical utility, heating, lighting, air conditioning, water, sewer and telephone connections, permits, identification sign, maintenance, custodial services and supplies, and all incidentals required to provide this service, complete and accepted by the Engineer.



Vermont

Basic Information

Summary

The DOT trailer requirements in Vermont are, for the most part, similar to other states. However, one primary difference is that Vermont doesn't specify requirements for different field offices. Instead, their specifications refer to all sizes and layouts of field offices in the state.

You can find more information about their requirements below or by visiting the Vermont Department of Transportation <u>website</u>.

VTRAN Contact Page: <u>https://vtrans.vermont.gov/contact-us</u>

VTRAN Highway Permits Page: <u>https://vtrans.vermont.gov/planning/permitting</u>

Craig Keller, P.E., Chief of Permitting Services: (802-279-1152)

Mailing Address: Vermont Agency of Transportation 219 North Main Street Barre, VT 05641



Layouts

As mentioned above, Vermont doesn't list any specific requirements for different field office layouts.

However, **all field offices** used in the state of Vermont must have a **minimum** floor space of **360 square feet.**

30



10' x 44' field office



Vermont

Licm SUR

BRIQUES



Note: This section is a reproduction of the current VTRAN requirements for field offices. For more information, consult the Vermont Department of Transportation website.

SECTION 631 - FIELD OFFICE

<u>631.01 DESCRIPTION</u>. This work shall consist of furnishing, erecting, equipping, and maintaining Field Offices and testing equipment. The work shall include cleaning, supplying Utility services, office furniture, equipment, and supplies as required for the exclusive use of the Agency engineering staff at locations approved by the Engineer. Upon completion of the Project, the Field Office(s), furniture, accessories, and equipment provided shall remain the property of the Contractor.

The testing equipment and supplies are furnished for the use of the Agency during the term of the Contract and shall be subject to use by Agency personnel to conduct tests of any materials at any location as directed by the Engineer.

Equipment furnished for testing of protective coatings will be used by the Engineer as required by the Contract.

631.02 FIELD OFFICES.

(a) <u>General</u>. Field Offices shall be available solely to the representatives of the State and the Federal Government throughout the duration of use for the respective type of Field Office, and shall be removed when released by the Engineer. Field Offices and equipment shall always be maintained in working condition to the satisfaction of the Engineer, including adequate supplies.



631

Field Offices shall not be located within any Operating Railroad Right-of-Way.

All Field Offices shall meet the following requirements:

- (1) <u>Foundation</u>. Field Offices shall be constructed on a firm foundation that will remain vibration free and that will not be adversely affected by frost action or water runoff.
- (2) <u>Design</u>. Field Offices shall be a commercial-type Field Office trailer of standard commercial quality, or a building, in good condition as determined by the Engineer with a minimum width of 10 feet. They shall have a minimum of two means of egress equipped with dead bolt locks and a minimum 4 foot × 4 foot deck with steps and railings in accordance with the VOSHA Safety and Health Standards for Construction.

The Contractor shall provide the Engineer with three sets of keys. The Contractor shall not access the Field Office without approval of the Engineer.

For the commercial-type Field Office trailer, Field Offices shall have a minimum of four side windows, one front window, and one rear window. Standard buildings shall have sufficient windows to the satisfaction of the Engineer. All windows shall be glassed and screened with provisions for opening and locking and equipped with adjustable louvered blinds.

Field Offices shall have a lighting system capable of providing a minimum of 50 foot-candles on all work surfaces and shall have a minimum 400 W exterior security light.

(3) <u>Electrical Service</u>. Field Offices shall be equipped with a 110 V AC, 60 Hz, single-phase electrical system with service entrance equipment suitable for power company attachment and with at least twelve properly positioned interior electrical duplex outlets. The materials and installation methods of all electrical wiring, connections, switches, and grounds shall conform to the provisions of the *National Electrical Code* and shall be in accordance with all State and local electrical ordinances.

The Contractor shall be responsible for arranging the connection of the electrical service to the Field Office.

(4) <u>Communications Services</u>. Field Offices shall have independent telephone and internet services such that both can be used simultaneously without impacting functionality. Internet service shall have a minimum download speed of 3 Mbps and a minimum upload speed of 1 Mbps. Jacks for connection to internet and telephone services shall be located at each end of the Field Office for both services.

When telephone and/or internet service is not practical, as determined by the Engineer, services may be omitted from the Field Office.



631

The Contractor shall be responsible for establishing all connections for communications services and maintaining communications services throughout the duration the Field Office is in use.

- (5) <u>Temperature Control</u>. Field Offices shall have heating and cooling systems capable of maintaining a temperature of 68°F at all times. Field Offices shall have thermostats capable of controlling and displaying the interior temperature.
- (6) Sanitary Facilities. Sanitary facilities consisting of a flush toilet, chemical toilet, or other approved type, including a waterless hand sanitizer, shall be furnished by the Contractor with proper sewage disposal as is necessary to comply with the requirements and regulations of the State and local Boards of Health and VOSHA. Sanitary facilities shall have adequate facilities for washing hands.

A potable water system consisting of a sink with a faucet within the office, with a continuous supply of pressurized clean potable water, shall be supplied for the duration of the Project. When clean potable water is not available, a commercial bottled drinking water system shall be installed in the Field Office complete with necessary disposable drinking cups (8 oz. size or larger), cup dispenser, and continuous water supply furnished for the duration of the Project. The system shall supply both hot and cold water. The system and the bottled water shall be furnished by a commercial water service on a regular basis agreeable to the Engineer.

- (7) Office Equipment. All Field Offices shall contain the following standard commercial-quality office equipment, with substitutions allowed upon approval of the Engineer:
 - 1 Standard office desk a minimum of 60 inches wide × 30 inches deep and with drawers, locks, and keys
 - 4 Ergonomic office chairs with adjustable lumbar support, adjustable height, and rolling casters
 - 2 Adjustable height drafting stools
 - 1 Secure, four-drawer, legal-size file cabinet, fire-resistant (rated to withstand a one-hour fire) with lock and two keys
 - 1 Telephone with touch tone dial, compatible with the local telephone service available and capable of receiving and storing messages
 - 2 30-gallon trash cans with trash bags
 - 1 Electric clock having a dial face at least 8 inches in diameter
 - 1 First aid kit conforming to the latest revision of ANSI/ISEA Z 308.1

TriumphModular.com

Modular for DOT

6-89

631

- 1 Halon fire extinguisher, equal in fire-fighting capacity to a 5-pound carbon dioxide fire extinguisher, or as needed in accordance with OSHA requirements
- 1 Outdoor thermometer, weatherproof, easy to read, and having a minimum scale range of -40°F to 120°F in graduations of 2°F

Field Offices shall be provided with ventilation and gas connections as required.

The Contractor shall furnish all labor and materials for winterizing Field Offices.

(b) <u>Field Office, Engineers</u>. Field Office, Engineers shall be available for use 7 Calendar Days prior to any work commencing, including erection of construction approach signing, until 30 Calendar Days after final inspection of the Project, unless otherwise directed by the Engineer.

In addition to Subsection 631.02(a), Field Office, Engineers shall meet the following requirements:

- (1) Size. Field Office, Engineers shall have a minimum floor space of 360 square feet.
- (2) <u>Office Equipment</u>. Field Office, Engineers shall contain the following standard commercial quality office equipment, with substitutions allowed upon approval of the Engineer:
 - 1 Rain gauge
 - 1 Standard drafting table a minimum of 72 inches wide × 37-1/2 inches deep
 - 1 Storage cabinet a minimum of 36 inches wide × 24 inches deep × 24 inches high
 - 1 Storage locker or closet of sufficient size for secure storage of surveying equipment
 - Printer/scanner/copier combination unit, inkjet minimum and color when deemed necessary by the Engineer, with a minimum tray capacity of 50 sheets and a minimum print speed of 10 sheets per minute. The combination unit shall be capable of handling 11 × 17-inch sheets. The combination unit shall be compatible with Microsoft Windows 7 and later versions and shall have wired and wireless network capabilities.

The printer/scanner/copier combination unit shall have an anti-static vinyl dust cover and a stand of sufficient size and strength to support the unit. Supplies for the printer/scanner/copier shall include $8-1/2 \times 11$ -inch paper, 11×17 -inch paper, and ink or toner in black and color as applicable.

All furnished equipment shall be maintained in good working order. Replacement equipment shall be provided within 48 hours for all equipment that is damaged, stolen, or becomes inoperative in any way.

The Contractor shall provide training to the Engineer in the use of the furnished equipment.

6-90



West Virginia

Basic Information



Summary

West Virginia currently has no specific DOT requirements for highway construction projects.

However, if you wish to contact the West Virginia Department of Transportation, you can find more information from <u>their website</u>.

Contact Page: <u>https://transportation.wv.gov/Pages/contact.aspx</u>

Email: dot.info@wv.gov

WVDOT Phone Number: (800) 642-9292 or (833) WV ROADS (833-987-6237)

Mailing Address: West Virginia Department of Transportation Building 5 1900 Kanawha Blvd E Charleston, WV 25305





While West Virginia doesn't have a size requirement, we've found that in other states the $12' \times 64'$ field office meets the most common layout requirements.



12' x 64' field office



New Jersey

Basic Information

Summary

Like Pennsylvania, New Jersey, has some of the most complex specifications and requirements for DOT trailers and field offices. In fact, they also include specifications for field laboratories and curing facilities.

You can find more information about their requirements below or by visiting the New Jersey Department of Transportation <u>website</u>.

Contact Page: <u>https://www.nj.gov/transportation/contact/</u>

Email: <u>CSPD@dot.nj.gov</u>

Bureau of Construction Services Phone Number: (609) 963-2312

Mailing Address: Bureau of Construction Services 1035 Parkway Avenue P.O. Box 600 Trenton, NJ 08625





The state of New Jersey splits its field office designations into eight layouts.

- Type A
- Type B
- Type C
- Type E
- Type F
- Materials Field Laboratory
- Curing Facility

Type A

The Type A field office in New Jersey is the smallest, with a minimum floor space of **288 square feet.** Additionally, it must have room for **one desk and one table with eight seats.**



10' x 36' field office



Layouts



Type B

The Type B field office in New Jersey has a minimum floor space of **482 square feet.** It also must have **two individual partitioned rooms.**



12' x 64' field office

Type C

The Type C field office in New Jersey has a minimum floor space of **626 square feet**. It also must have **three individual partitioned rooms**.







Layouts



Type D

The Type D field office in New Jersey has a minimum floor space of **720 square feet.** It also must have **four invidually partioned rooms.**



12' x 64' field office

Type E

The Type E field office in New Jersey has a minimum floor space of **864 square feet.** It also must have **four individual partitioned rooms and room to seat twenty-four.**



24' x 64' field office



Layouts



Type F

The Type F field office in New Jersey has a minimum floor space of **1008 square feet.** It also must have **five individual partitioned rooms.**



36' x 64' field office





Materials Field Laboratory

New Jersey's Materials Field Laboratory designation must have a minimum floor space of 1050 square feet. Room One is 450 square feet, and Room Two is 600 square feet with a concrete floor. The 10' x 50' mobile office meets the **Room One** space requirements.



10' x 50' field office

Curing Facility

The Curing Facility designation in New Jersey must have a minimum floor space of 300 square feet and requires a concrete floor.

Because of this specification a mobile office would not meet this requirement.





Note: This section is a reproduction of the current NJ DOT requirements for field offices. For more information, consult the New Jersey Department of Transportation website.

SECTION 155 – CONSTRUCTION FIELD OFFICE

155.01 DESCRIPTION

This Section describes the requirements for set up and maintenance of the Department's construction field office.







155.02 MATERIALS

(Intentionally Blank)

155.03 PROCEDURE

155.03.01 Field Office

Provide and maintain a safe and secure field office for the exclusive use of the Department, until no longer required by the Department, at a location within or in the immediate vicinity of the Project Limits and approved by the RE. Do not lock out, or make the Field Office inaccessible to, the RE or any Department employees, consultants, or representatives at any time. Do not use any building scheduled for demolition under the Contract as a field office. If the field office is a temporary structure within State ROW, secure necessary permits from the New Jersey Department of Community Affairs, and remove the structure when directed by the RE.

Ensure that the field office is weatherproof with a minimum ceiling height of 7 1/2 feet and conforms to the requirements specified in <u>Table 155.03.01-1</u>. Ensure that 1 of the rooms of the field office has a minimum area of 288 square feet. Ensure that the other rooms have a minimum area of 144 square feet, except for conference rooms, which require a minimum area of 288 square feet. Ensure that the field office doors and windows have locks. Provide the keys to the RE. Ensure that the field office has one or more closets of sufficient capacity for the office's size.

1. Office Size Requirements. Provide the following, at a minimum, for the field office type specified:

Description	Field Office Type						
	A	B	С	D	E	F	
Total Area (SF)	288	482	626	720	864	1008	
Number of Rooms ¹	1	2	3	4	4	5	
Conference Room	0	0	0	0	1	1	
Desks with Swivel Chairs	2	4	6	8	8	10	
Tables and chairs to seat	8	12	16	20	24	28	
File Cabinets ²	2	4	4	4	4	8	
Plan Racks ³	1	2	2	3	3	4	
Parking spaces ⁴	4	5	6	8	8	10	

Including conference room.

2. Having a UL rating of 350 °F - 1 hour, 4 drawers, legal-size with lock and 2 keys.

Capable of holding 1,200 plan sheets.

4. Free parking on a paved or hard surfaced area adjacent to the building.

- Utilities and Lighting. Provide all utility services and connections including water, sewer, gas, electricity, telephone, and broadband internet. Provide a separate telephone line for each telephone, computer modem, and fax machine specified in <u>155.03.01.4</u>. Provide a field office with sufficient natural and artificial light. Provide adequate insulation, heat, and air-conditioning to maintain an ambient temperature of 68 to 80 °F.
- Lavatory. Provide a separately enclosed and properly ventilated room with washing and toilet facilities suitable for use by male and female employees. Ensure that the facilities have hot and cold running water. Equip the doors and windows with locks.
- 4. Communication Equipment. Provide the following communication systems:
 - a. Telephones. Provide a phone system as specified in the Special Provisions. Ensure that each phone is connected to the answering system.
 - b. Fax Machine. Provide a fax machine with built-in telephone, auto-dial, auto-re-dial, and auto-receive, and out-of-paper reception features.
 - c. Cell Phones. Provide cell phones as specified in the Special Provisions.
 - d. Computer System. Provide a computer system as specified in the Special Provisions.



Do not procure the computer system until reviewing the system requirements with the RE. Ensure that the computer system is compatible with the Department's construction management software and other specified software.

When the computer system is no longer required by the RE, the Department will remove and retain the hard drive, and return the computer system to the Contractor. The Department will retain other data storage media.

- 5. Office Furnishings. Provide the following:
 - a. Two book cases.
 - b. A drafting table and stool.
 - c. A supply cabinet.
 - d. A water cooler having both hot and cold water dispensers, and bottled water service.
 - e. A type ABC fire extinguisher having UL-approval.
 - f. A 24 person first-aid kit according to ANSI Z308.1, 1 tick removal tweezers, and 4 aerosol cans of insect repellent containing DEET. Restock first aid supplies and insect repellant as needed.
 - g. A wastepaper basket for each room.
 - h. Two 3×4 foot bulletin boards.
 - i. A 1.7 cubic foot refrigerator.
- 6. Office Equipment. Provide the following:
 - a. A copier with automatic document feed, 15 pages per minute copy speed, variable reduce/enlarge capability, and letter, legal, and ledger size capabilities. Erase the copier hard drive before removing the copier from the field office and provide the RE with a certification stating that the copier hard drive has been erased.
 - b. A digital camera as specified in the Special Provisions.
 - c. A video camcorder as specified in the Special Provisions.
 - d. A printing adding machine.
 - e. A paper shredder with a minimum throat of 8.75 inches, and a feed capacity of at least 10 sheets.
- 7. Inspection Equipment. Provide as specified in the Special Provisions.

155.03.02 Field Office Maintenance

Maintain the field office including furnishings, equipment, lavatories including toiletries, and utilities until no longer required by the Department. Provide services for utilities specified in <u>155.03.01.2</u>. Provide for utility disconnection when the field office is no longer required by the RE. Assume that the field office will be required for a minimum of 3 months after Completion. Provide weekly janitorial and waste disposal service, and snow removal service as needed. Provide 1 case of letter, legal, and ledger sized paper every 2 months.

Repair or replace inoperable or defective communication, office, and inspection equipment within 24 hours. The Contractor is not responsible for replacing or repairing Items that are lost or damaged due to misuse.

155.04 MEASUREMENT AND PAYMENT

The Department will measure and make payment for Items as follows:

Item		Pay Unit
FIELD OFFICE TYPE	SET UP	UNIT
FIELD OFFICE TYPE	MAINTENANCE	MONTH

The Department will make payment for FIELD OFFICE TYPE _____MAINTENANCE for each month or portion of a month that the field office is required, except that the Department will not make payment for any month or fraction of a month that the Contractor is assessed liquidated damages as specified in 108.20.



$\left\{ \right\}$

SECTION 156 - MATERIALS FIELD LABORATORY AND CURING FACILITY

156.01 DESCRIPTION

This Section describes the requirements for set up and maintenance of the Department's materials field laboratory and curing facility.

156.02 MATERIALS

(Intentionally Blank)

156.03 PROCEDURE

156.03.01 Materials Field Laboratory

Do not provide or procure the materials field laboratory or associated equipment until the RE notifies that this item is required.

Within 15 days of RE notification, provide and maintain a materials field laboratory for the exclusive use of the Department, until no longer required by the Department, at a location approved by the ME. Do not lock out, or make the Materials Field Laboratory inaccessible to, the RE or any Department employees, consultants, or representatives at any time. Do not use buildings scheduled for demolition under the Contract as a materials field laboratory. The ME will not conduct testing until the materials field laboratory is ready for use.

If the field laboratory is a temporary structure within State ROW, secure the necessary permits from the New Jersey Department of Community Affairs, and remove the structure as directed by the RE.

Provide a Uniform Code Type Four Fire Permit according to the New Jersey Department of Community Affairs regulations. The Contractor may obtain information concerning the permit fees and the permit application process from the Department's Bureau of Materials.

Ensure that the materials field laboratory is weatherproof with a minimum ceiling height of 7 1/2 feet. Ensure that one of the rooms has a minimum area of 450 square feet. Ensure that there is an additional room or enclosure with a concrete floor with a minimum area of 600 square feet. Ensure that each room has at least four 3 prong electrical outlets, having a minimum of two 20 ampere, 120 volt circuits.

Ensure that the materials laboratory doors and windows have locks, and provide the keys to the ME. Ensure that the materials field laboratory has one or more closets of sufficient capacity for the office's size. Provide the following for the materials field laboratory:

- Utilities and Lighting. Provide all utility services and connections including water, sewer, gas, electricity, telephone, and broadband internet. Provide a separate telephone line for each telephone, computer modem, and fax machine specified in <u>156.03.01.4</u>. Provide a field office with sufficient natural and artificial light. Provide adequate insulation, heat, and air-conditioning to maintain an ambient temperature of 68 to 80 °F.
- 2. Lavatory. Provide a lavatory as specified in 155.03.01.3.
- Parking. Provide 6 free parking spaces on a paved or hard surfaced area adjacent to the materials field laboratory.
- 4. Communication Equipment. Provide the following communication systems:
 - a. Telephones. Provide 2 cordless phones with auto-switching.
 - b. Fax Machine. Provide 1 fax machine with built-in telephone, auto-dial, auto-re-dial, and auto-receive, and out-of-paper reception features.
 - c. Cell Phones. Provide cell phones as specified in the Special Provisions.
 - d. Computer System. Provide a computer system as specified in the Special Provisions.

Do not procure the computer system until reviewing the system requirements with the ME. Ensure that the computer system is compatible with the Department's construction management software and other specified software.



When the computer system is no longer required by the ME, the Department will remove and retain the hard drive, and return the computer system to the Contractor. The Department will retain other data storage media.

- 5. Office Furnishings. Provide furnishings, as specified in 155.03.01.5, and the following:
 - a. Four desks with 4 desk chairs and 4 chairs.
 - b. A work bench having a minimum area of 2 1/2 × 10 feet, and 2 stools.
 - c. Shelving having a minimum area of 45 square feet.
- 6. Office Equipment. Provide the following:
 - a. A copier with automatic document feed, 15 pages per minute copy speed, variable reduce/enlarge capability, and letter, legal, and ledger size capabilities. Erase the copier hard drive before removing the copier from the field office and provide the RE with a certification stating that the copier hard drive has been erased.
 - b. A printing calculator, with trigonometric function capability.
 - c. A paper shredder with a minimum throat of 8.75 inches, and a minimum feed capacity of 10 sheets.
- 7. Laboratory Equipment. Provide the following:
 - a. Primary Laboratory Room. Equip the primary laboratory room with the following:
 - 1. A 12 inch diameter exhaust fan or alternative means for venting heat, dust, and fumes.
 - 2. Two gas stoves, each having at least 2 burners.
 - 3. Either commercially bottled gas service or gas supplied by a Utility with at least 2 connections to be located as directed by the ME.
 - A sink with hot and cold running water, having adequate pressure, and equipped with 2 drain boards, and a drain-disposal system (silt trap or similar) capable of handling elutriable material.
 - 5. A metal stand to hold sieves used in washing elutriable material.
 - 6. Two wheelbarrows.
 - 7. A light duty oil-less air compressor listed by UL with a 2.5 gallon storage tank, a start/stop switch -94 pounds per square inch over 125 pounds per square inch, a 115 volt universal motor, an ASME safety valve, and a 25 foot air hose, equipped with a quick-change blow gun kit and nozzle kit consisting of a high-flow safety nozzle, a 6 inch extension safety nozzle, a rubber tip nozzle, a needle tip nozzle, and an air screen safety nozzle.
 - 8. An exhaust vent hood enclosed on 3 sides, top, and bottom, of such size to enclose the operations of drying and weighing a recycled concrete aggregate sample, and other operations in which a vapor or gas is emitted. Design and construct the hood so that any operation involving testing within the hood does not require the insertion of any portion of the tester's body, other than hands and arms. Ensure that the exhaust system is capable of producing an air speed of 80 to 120 feet per minute at the face of the opening.
 - 9. Shovels and scoops for sampling soil aggregate and concrete.
 - 10. Provide a nomograph. Supply the instruments necessary to measure air temperature, relative humidity, and wind speed, including 2 battery operated psychrometers, 2 concrete thermometers, and 2 wind gauges. Obtain certification from an independent, ME-approved laboratory that all instruments are in good working order and have been calibrated as requested by the ME.
 - b. Additional Room or Enclosure. Equip the additional room or enclosure with the following:
 - 1. Two 12 inch diameter exhaust fans or alternative means for venting heat, dust, and fumes.
 - 2. A 7 day spring-driven temperature recording device capable of producing a permanent record of the room temperature, with a supply of recording charts and pens.
 - Install a concrete block weighing a minimum of 200 pounds and measuring approximately 10 × 10 × 24 inches with a 10 × 10 × 1 inch steel plate fastened to the top. Install the block on a firm foundation at a location directed by the ME.
 - Two sound-dampened and dustproof cabinets constructed of at least 3/4 inch plywood or other suitable material and of sufficient size to house the mechanical sample shaker and the mechanical sieve shaker.



- 5. A separate cabinet for the purpose of housing and storing a nuclear density gauge. Ensure that the cabinet is constructed of 3/4 inch plywood or particle board and lead sheathing, or any other acceptable materials, to ensure that a radiation reading of no higher than 2 nanorads per hour is obtained by contact measurement of the outside wall of the storage cabinet. This second cabinet must be securable and have a door equipped with a heavy-duty lock with 2 keys provided. Before this cabinet is constructed, obtain approval from the ME of the exact location, materials to be used for its construction, and locking system.
- 6. Water tanks capable of storing three hundred 4 × 8 inch concrete cylinders fully submerged and in an upright position. Provide a 5/8 inch water hose at least 50 feet in length. Equip the water tank with a heater capable of maintaining a water temperature of 73 ± 3 °F.
- 8. Laboratory Testing Equipment. Provide testing equipment and apparatus conforming to that listed in AASHTO R 60, T 11 (including a mechanical washing machine), T 23, T 27, T 99, T 119, T 121, T 152, T 248, and T 309. Provide 4 units or the number specified by the ME, of the testing apparatus to satisfy the inspection and testing frequency anticipated. In addition, ensure that scales are electronic, except for those required for AASHTO T 121. Ensure that scales are inspected and certified by an independent scale company accredited according to the International Organization of Standards/International Electrotechnical Commission 17025, or a State or county Office of Weights and Measures. Provide the ME with a copy of the certification at the time of installation. Ensure that the scales are re-certified annually, or every 6 months if directed by the ME.
- 9. Inspection Equipment. Provide as specified in the Special Provisions.

156.03.02 Materials Field Laboratory Maintenance

Maintain the materials field laboratory including furnishings, equipment, lavatories including toiletries, and utilities until no longer required by the Department. Provide services for the utilities specified in <u>156.03.01.1</u>. Provide for utility disconnection when the field office is no longer required by the ME. Provide weekly janitorial and waste disposal service, and snow removal service as needed. Provide 1 case of letter, legal, and ledger sized paper every 2 months.

Repair or replace inoperable or defective communication equipment, office furnishings, office equipment, laboratory equipment, and laboratory testing equipment within 24 hours. The Contractor is not responsible for cost of replacing or repairing items that are lost or damaged due to misuse.

156.03.03 Curing Facility

Do not provide or procure the curing facility or associated equipment until the RE notifies that this item is required.

Within 15 days of RE notification, provide and maintain a curing facility for the exclusive use of the Department, until no longer required by the Department, at a location approved by the ME. Do not lock out, or make the Curing Facility inaccessible to, the RE or any Department employees, consultants, or representatives at any time. Do not use buildings scheduled for demolition under the Contract as a materials field laboratory. The ME will not conduct testing until the curing facility is ready for use.

Maintain the curing facility until no longer required by the ME. Assume that the curing facility will be required for a minimum of 1 month after Completion. If the curing facility is a temporary structure, secure the necessary permits from the New Jersey Department of Community Affairs, and remove the structure as directed by the RE.

Ensure that the curing facility is weatherproof with a minimum ceiling height of 7 1/2 feet. Ensure that the curing facility has a concrete floor and a minimum area of 300 square feet. The room shall have a minimum of three 3 prong electrical outlets.

Ensure that the curing facility doors and windows have locks, and provide all keys to the ME. Provide the following for the curing facility:

- Utilities and Lighting. Provide all utility services and connections including water, sewer, gas, and electricity. Provide a curing facility with sufficient natural and artificial light. Provide adequate insulation, heat, and airconditioning to maintain an ambient temperature of 68 to 80 °F.
- 2. Furnishings. Provide the following:
 - a. One work bench having a minimum area of 2 1/2 × 10 feet, and 2 stools.
 - b. One type ABC, fire extinguisher having UL approval.



- 3. Equipment. Provide the following:
 - a. One sink with hot and cold running water.
 - b. One wheelbarrow.
 - c. One light duty oil-less air compressor listed by UL with a 2.5 gallon storage tank, a start/stop switch -94 pounds per square inch over 125 pounds per square inch, a 115 volt universal motor, an ASME safety valve, and a 25 foot air hose, equipped with a Quick-Change Blow Gun Kit and Nozzle Kit consisting of a high-flow safety nozzle, a 6 inch extension safety nozzle, a rubber tip nozzle, a needle tip nozzle, and an air screen safety nozzle.
 - d. One 7 day spring-driven temperature recording device capable of producing a permanent record of the room temperature.
 - e. Two 12 inch diameter exhaust fan or alternative means for venting heat, dust, and fumes.
 - f. Water tanks capable of storing 300, 4×8 inch concrete cylinders fully submerged and in an upright position. Provide a 5/8 inch water hose at least 50 feet in length. Equip the water tank with a heater capable of maintaining a water temperature of 73 ± 3 °F.

156.03.04 Curing Facility Maintenance

Maintain the curing facility including furnishings and curing facility equipment for the duration of the Contract or until no longer required by the ME. Provide services for utilities specified in <u>156.03.03.1</u>. Provide for utility disconnection when the curing facility is no longer required by the ME. Provide weekly janitorial and waste disposal service and snow removal service as needed.

Repair or replace inoperable or defective furnishings and curing facility equipment within 24 hours. The Contractor is not responsible for cost of replacing or repairing items that are lost or damaged due to misuse.

156.03.05 Nuclear Density Gauge

Provide for the Department's exclusive use and for the duration of the Project a nuclear density gauge calibrated to the manufacturer's specifications, with the following minimum features and capabilities:

- 1. Conformance to AASHTO T 310.
- 2. Backscatter and direct transmission modes.
- 3. 8 inch minimum length of probe.
- 4. Automatic warm-up and self-test.
- Automatic data storage and data transfer features, including an RS232 interface cable, specifically configured to transfer data from the density gauge to the microcomputer system and with data communication software.
- Count times of 0.25, 1.0, and 4.0 minutes.
- 0.25 pounds per cubic foot dry density precision in direct transmission at 120 pounds per cubic foot and at 1.0 minute, with ±0.3 percent accuracy.
- 8. 0.32 pounds per cubic foot moisture precision at 1.0 minute, with ±2.0 percent accuracy.
- 9. Type A certified package.

Provide a nuclear density gauge for the exclusive use of the ME using one of the following methods:

- Purchase a nuclear density gauge under the Contractor's New Jersey Department of Environmental Protection (NJDEP) License or the Contractors United States Nuclear Regulatory Commission (USNRC) license.
- Lease a nuclear density gauge from a New Jersey Department of Environmental Protection (NJDEP) or United States Nuclear Regulatory Commission (USNRC) licensed third party on the Department's New Jersey Department of Environmental Protection (NJDEP) License.

The Contractor is barred from purchasing gauges on the Department's New Jersey Department of Environmental Protection (NJDEP) license. Perform calibration and servicing of the gauge, other than routine wipe tests, every 24 months. The ME may direct additional calibrations, when necessary. Supply a replacement gauge for the Department's use during the calibration and servicing period.

156.03.06 Flexural Beam Testing Equipment

Provide the following testing equipment and apparatus:

1. A Flexural Beam Tester according to AASHTO T 97.





- 2. Twelve 6 × 6 × 21 inch reusable steel beam molds with handles according to AASHTO T 23.
- 3. Leaf type feeler gauges and carpenter's square.
- Calipers capable of measuring inside and outside dimensions ranging from 0 to 300 millimeters in maximal calibrations of 0.25 millimeters.
- A hand-held 180 millimeter Heavy-Duty Angle Grinder (120V, 15A, 6000 rpm) with an initial supply of 3 masonry grinding wheels. Provide additional grinding wheels within 48 hours of request.

Maintain and calibrate the testing equipment annually.

156.03.07 Concrete Compression Testing Equipment

Provide a Concrete Compression Tester according to AASHTO T 22. Ensure the testing equipment is maintained and calibrated annually.

156.04 MEASUREMENT AND PAYMENT

The Department will measure and make payment for Items as follows:

Item	Pay Unit
MATERIALS FIELD LABORATORY SET-UP	UNIT
MATERIALS FIELD LABORATORY MAINTENANCE	MONTH
CURING FACILITY SET-UP	UNIT
CURING FACILITY MAINTENANCE	MONTH
NUCLEAR DENSITY GAUGE	UNIT
FLEXURAL BEAM TESTING EQUIPMENT	UNIT
CONCRETE COMPRESSION TESTING EQUIPMENT	UNIT

The Department will include the installation of telephone and cellular phone services in the MATERIALS FIELD LABORATORY SET-UP.

The Department will make payment for maintenance of the materials field laboratory for each month or portion of a month it is required, except that the Department will not make payment for any month or fraction of a month that the Contractor is assessed liquidated damages as specified in <u>108.20</u>. The Department will include the monthly fixed charges for telephones and cellular phones in MATERIALS FIELD LABORATORY MAINTENANCE.

The Department will make payment for CURING FACILITY MAINTENANCE for each month or portion of a month it is required, except that payment will not be made for any month or fraction of a month that the Contractor is assessed liquidated damages as specified in <u>108.20</u>.



Delaware

Basic Information



Summary

Delaware currently has no specific DOT requirements for highway construction projects.

However, if you wish to contact the Delaware Department of Transportation, you can find more information from <u>their website</u>.

Contact Page: <u>https://deldot.gov/About/contact_info/index.shtml</u>

Email: <u>dotpublic@delaware.gov</u>

DELDOT Phone Number: (800) 652-5600 or (302) 760-2080

Mailing Address: Delaware Department of Transportation

New Castle County 119 Lower Beech Street, Suite 100 Wilmington, DE 19805

Kent County 900 Public Safety Blvd Dover, DE 19901





While Delaware doesn't have a size requirement, we've found that in other states the $12' \times 64'$ field office meets the most common layout requirements.



12' x 64' field office



Other Options

Most states have specific requirements for what goes inside highway construction field offices beyond spacial requirements, such as furnishings, technology, and more.

At Triumph Modular, our modular offerings can provide you with the right size field office to meet your needs. We also have The Solutions furniture packages that can help you meet the specific requirements of the state that you're working in.

Some of these <u>furnishing packages</u> include:

- Express Office
- Planning Solution
- Express Bistro
- Business Bistro
- Express Conference
- Business Conference

However, we can't provide everything. Certain items, such as computers, will need to be acquired separately.



If you're having difficulty finding specific items to meet your state's requirements, don't worry. Our local sales representatives are here to help. With their extensive knowledge, they can guide you through the necessary steps and ensure you get the items you need. Contact us today to get started.







Now that you've made it through all the red tape, it's time to order your field office—best to put your order in early, too.

Triumph Modular can set you up with the field office you need to do the job. Our expert team guides you through the purchasing process to ensure that you're following all state regulations for a seamless project experience.

Request a quote from our sales team today!

REQUEST A QUOTE



Questions About Field Offices?

As an industry leader in modular construction, our expertise in <u>mobile office trailers</u> and <u>modular construction</u> is unmatched.

Reach out to us with any questions you may have. We're always here to help.

Request a Quote or call 1-800-257-2536



TriumphModular.com