

BRIDGE DESIGN STANDARD PRACTICES

The following standard practice has been established by the Bridge Design Standard Practices Committee.

Transportation of Structural Members and Components

In general, the height, width, length and weight of a prefabricated structural member or component for use in a highway structure constructed within the State of Connecticut are limited by the ability to ship the item over state roads and bridges.

These physical properties are indirectly limited by the vehicle regulations in the Connecticut General Statutes. The General Statutes include the following limitations on the dimensions of vehicles using State highways without the need for a permit:

Vehicle Width (Section 14-262 (a)(1)) - The width of a vehicle or combination vehicle and trailer, including its load, is limited to 8'-6" (2590 mm), without a permit.

Vehicle Length (Section 14-262 (c)) - The length of the semi-trailer portion of a tractor-trailer unit, including its load, is limited to 48' (14 630 mm), without a permit.

Vehicle Height (Section 14-264) - The height of a vehicle, with its load, is limited to 13'-6" (4110 mm), without a permit.

Vehicle Weight (Section 14-267a (b)(7)) - The gross vehicle weight (weight of the vehicle including its load) is limited to 80,000 pounds (36 280 kg), on vehicles with a 51' (15 549 mm) wheelbase, without a permit.

Axle Weights of Vehicles (Section 14-267 (a)) - The axle weight of vehicles varies and is determined by vehicle type and axle spacing.

Section 14-270 of the General Statutes assigns authority to the Commissioner of Transportation to grant permits for vehicles exceeding the limits of the vehicular regulations.

To facilitate construction of the Department's projects, Policy Statement PT-14 was developed. It states that the Department will grant a permit for the transportation of any structural member that measures 120' (36 570 mm) or less and weighs no greater than 120,000 pounds (54 430 kg), provided the individual axle weights on the vehicle and trailer transporting the member do not exceed 20,000 pounds (9070 kg).

The vehicle regulations of the General Statutes and Policy Statement PT-14 establish design guidelines for the height, width, length and weight of structural members or components.

To avoid problems associated with the transportation of structural materials during construction, the following information must be included on the general plan for all structures that contain members or

components that require a permit for transportation:

- Maximum shipping length
- Maximum shipping weight
- Maximum height and width

For the Structure Layout for Design (SL/D) submission the best available information should be included on the plans. The actual, as designed, shipping lengths, weights, heights and widths should be shown on the Final Plans for Review.

This information will be reviewed by Motor Transport Services who will determine if the members for the project are transportable. If the length or weight limits of Policy Statement PT-14 must be exceeded on a particular project, the designer must submit adequate justification along with the above information at the SL/D stage. If sufficient justification exists, the Office of Engineering will apply for a design waiver.

The special provision entitled "Section 1.06 - Control of Materials" should be included in all future projects. This special provision addresses the shipping of materials in accordance with the Connecticut General Statutes and the Department's Policy Statement PT-14. If a design waiver is granted to use members in excess of the limits of PT-14, the special provision must be amended to indicate that the Department will grant a permit to transport the oversize items.

On all projects using structural steel, the special provision entitled "Section 6.03 - Structural Steel" should be included. This special provision addresses Contractor proposed changes to field splice locations shown on the plans that would result in shipping lengths and/or weights that exceed the limits listed in Policy Statement PT-14.

Attached are copies of Policy Statement PT-14, and the special provisions "Section 1.06 - Control of Materials" and "Section 6.03 - Structural Steel." The special provisions are provided on both "Customary U.S." and "Metric" unit formats and are.