October 28, 2018

His Excellency, Governor Christopher T. Sununu
State House
107 North Main Street
Concord, NH 03301

Subject: SB 452-FN
AN ACT requiring certain state agencies to conduct an audit of laws governing coastal regions to enable authorities to take appropriate actions

Dear Governor Sununu:

As required by Chapter 195, Laws of 2016 (SB 452-FN), the Department of Transportation is submitting this final report on activities it has undertaken relative to audit findings and recommendations to determine any changes necessary so that authorities can adequately address and enable appropriate state actions necessary to prepare for flood risks, such as projected storm surge, sea-level rise, and precipitation events.

The Department’s Climate Change Committee has been meeting regularly since the passage of SB 452-FN to evaluate sections of NH Transportation Law (Title XX) and NH Code of Administrative Rules (Tra 100-1000) to determine any changes necessary so that authorities can adequately address and enable appropriate state actions to prepare for flood risks, such as projected storm surge, sea-level rise, and precipitation events. In addition, in completing this evaluation, the Department has made specific reference to Chapter 195, Laws of 2016, which requires referencing the 2014 Coastal Risks and Hazards Commission report, “Sea-level Rise, Storm Surges, and Extreme Precipitation in Coastal New Hampshire: Analysis of Past and Projected Future Trends,” in the planning, siting, and design of state-funded structures and facilities, public works projects, and transportation projects in the coastal and Great Bay regions. Outlined below is a summary of the Department’s evaluation, with possible, specific law/rule changes attached.

**Title XX: TRANSPORTATION (Chapter 228-Chapter 240)**

RSA 230:11 Layout Across Stream – Add the requirement to reference, as guidance, Chapter 195, Laws of 2016 when laying out a highway across a stream or body of water

RSA 230:13 Occasion for Layout by Governor and Council; Layout - Add the consideration of storm surge, sea level rise, and flood risks when considering acquisition of property associated with consideration of environmental effects of transportation projects.

RSA 230:14 Layout by Commission - Add the consideration of storm surge, sea level rise, and flood risks when considering acquisition of property associated with consideration of environmental effects of transportation projects.
RSA 230:81 Snow, Ice and Other Weather Hazards – Add “tidal storm surge” to the list of hazards on public highways for which the Department of Transportation shall not be held liable for damages arising from insufficiencies.

RSA 234:5 Application; Compliance with Certain Standards – Add the requirement to reference, as guidance, Chapter 195, Laws of 2016 for applications for bridge aid.

RSA 235:14 Application for State Aid; Compliance with Certain Standards – Add the requirement to reference, as guidance, Chapter 195, Laws of 2016 for applications for State aid for Class I, II and III Highways.

RSA 235:34 – State Contribution to Damage Losses – Add the “effects of storm surge” to damages through disaster.

RSA 236:13 Driveways and Other Accesses to the Public Way – Add the requirement to reference, as guidance, Chapter 195, Laws of 2016 for work undertaken in the coastal and Great Bay regions of the state.

RSA 240:3 Implementation of Plan – Add the requirement to reference, as guidance, Chapter 195, Laws of 2016 for work undertaken in the coastal and Great Bay regions of the state.

CHAPTER Tra 500 CONSTRUCTION AID AND RELOCATION SERVICES

Tra 501.04 Bridge Project Design Criteria – Add the requirement to reference, as guidance, Chapter 195, Laws of 2016 for work undertaken in the coastal and Great Bay regions of the state. In addition, update references to design standards and manuals.

Tra 501.10 Design and Review; Municipally-Managed Projects – Add the requirement to reference, as guidance, Chapter 195, Laws of 2016 for work undertaken in the coastal and Great Bay regions of the state.

Tra 502.04 Highway Project Design Criteria – Add the requirement to reference, as guidance, Chapter 195, Laws of 2016 for work undertaken in the coastal and Great Bay regions of the state.

Tra 502.09 Design and Review; Municipally-Managed Projects – Add the requirement to reference, as guidance, Chapter 195, Laws of 2016 for work undertaken in the coastal and Great Bay regions of the state.

Most Sincerely,

Victoria F. Sheehan
Commissioner

c.c. Senate President Chuck Morse
House Speaker Gene G. Chandler
Tammy Wright, Senate Clerk
Paul C. Smith, House Clerk
Michael York, State Librarian

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CHAPTER 230 STATE HIGHWAYS

Duty to Construct and Maintain Highways
230:11 Layout Across Stream
230:13 Occasion for Layout by Governor and Council; Layout
230:14 Layout by Commission

Liability of the Department of Transportation
230:81 Snow, Ice and Other Weather Hazards

CHAPTER 234 BRIDGES AND BRIDGE AID
234:5 Application; Compliance with Certain Standards

CHAPTER 235 FEDERAL AND STATE HIGHWAY AID
235:14 Application for State Aid; Compliance With Certain Standards

Construction and Reconstruction Aid
235:34 State Contribution to Damage Losses

CHAPTER 236 HIGHWAY REGULATION, PROTECTION AND CONTROL REGULATIONS
236:13 Driveways and Other Accesses to the Public Way

CHAPTER 240 STATE 10-YEAR TRANSPORTATION IMPROVEMENT PROGRAM
240:3 Implementation of Plan
CHAPTER 230 STATE HIGHWAYS

230:11 Layout Across Stream. – A highway or any alteration thereof may be laid out across any stream or body of water; but no highway or bridge shall be so laid out if the reasonable and proper construction thereof may prevent the use of such waters for navigation for boats or rafts, or for running timber. Such layout, when undertaken in the coastal and Great Bay regions of the state, shall reference as guidance for all potentially affected activities within said regions, the requirements of NH Laws of 2016 Chapter 195:1 III (SB 452).

230:13 Occasion for Layout by Governor and Council; Layout. –

I. The governor, with advice of the council, may determine upon hearing whether there is occasion for the laying out or alteration of a class I or class II highway or a highway within the state included in the national system of interstate highways as proposed by the commissioner of transportation, and, if so, shall appoint a commission of 3 persons who may purchase land or other property that is reasonably necessary for the construction, reconstruction, or alteration and who shall lay out the remainder of such highway or alteration. Any such land or property which cannot be acquired by agreement with the owner or owners thereof may be acquired in accordance with RSA 498-A and all issues that are appealed relating to necessity, public use, and net public benefit shall be determined in accordance with RSA 230:19. Property rights acquired under the provisions of this section shall be in fee simple or in the form of easements, including property acquired by condemnation proceedings.

II. The commission may acquire such property as it determines reasonably necessary to:

(a) Lay out and establish, construct, improve, or maintain, provide a change of alignment of, or provide drainage for class I or class II highways.

(b) Construct, improve, and maintain transportation projects as directed by law and provide mitigation for existing or potential environmental effects of transportation projects. When located in the coastal and Great Bay regions of the state, such effects may include storm surge, sea-level rise and flood risks.

(c) Provide rest areas, parking strips, and roadside and landscape development for the preservation and development of natural scenic beauty.

(d) Provide for the health, safety, and welfare of the public using a class I or class II highway.

(e) Secure materials, with necessary ways and access, for the construction, improvement, and maintenance of class I or class II highways.

(f) Erect administrative, storage, and operational buildings.

230:14 Layout by Commission. –

I. The governor, with advice of the council, may appoint a commission of 3 persons who, upon hearing, shall determine whether there is occasion for the laying out or alteration of a class I or class II highway or a highway within the state included in the national system of interstate highways as proposed by the commissioner of transportation and if so, shall appoint a commission of 3 persons who may purchase land or other property that is reasonably necessary for the construction, reconstruction, or alteration and shall lay out the remainder of such highway or alteration. Any such land or property which cannot be acquired by agreement with the owner or owners thereof may be acquired in accordance with RSA 498-A and all issues that are appealed relating to necessity, public use, and net public benefit shall be determined in accordance with RSA 230:19. Property rights acquired under the provisions of this section shall be in fee simple or in the form of easements, including property acquired by condemnation proceedings.

II. The commission may acquire such property as it determines necessary to:

(a) Lay out and establish, construct, improve, or maintain, provide a change of alignment of, or provide drainage for class I or class II highways.

(b) Construct, improve, and maintain transportation projects as directed by law and provide mitigation for existing or potential environmental effects of transportation projects. When located in the coastal and Great Bay regions of the state, such effects may include storm surge, sea-level rise and flood risks.

(c) Provide rest areas, parking strips, and roadside and landscape development for the preservation and development of natural scenic beauty.

(d) Provide for the health, safety, and welfare of the public using a class I or class II highway.

(e) Secure materials, with necessary ways and access, for the construction, improvement, and maintenance of class I or class II highways.
(f) Erect administrative, storage, and operational buildings.

230:81 Snow, Ice and Other Weather Hazards. – Notwithstanding RSA 230:78-80, the department of transportation shall not be held liable for damages arising from insufficiencies or hazards on public highways or highway bridges thereon, even if it has actual notice or knowledge of them, when such hazards are caused by snow, ice, tidal storm surge, or other inclement weather, and the department of transportation's failure or delay in removing or mitigating such hazards is the result of its implementation, absent gross negligence or reckless disregard of the hazard, of a winter or inclement weather maintenance policy or set of priorities adopted in good faith by the officials responsible for such policy; and all department of transportation employees and officials shall be presumed to be acting pursuant to such a policy or set of priorities, in the absence of proof to the contrary.

CHAPTER 234 BRIDGES AND BRIDGE AID

234:5 Application; Compliance with Certain Standards. –
I. The selectmen of a town, the mayor of a city, or the county commissioners for an unincorporated place may annually apply to the commissioner of transportation in the manner prescribed by the commissioner for bridge aid on a class II, IV, or V highway or a county-owned road. The county commissioners may annually apply to the commissioner of transportation in the manner prescribed by the commissioner for bridge aid for a county-owned bridge.
II. The commissioner of transportation shall require that the highway design be in compliance with standards set forth in department of transportation manuals relating to bridge and highway construction and may adopt such manuals by reference.
III. The commissioner of transportation shall require that projects and actions in the coastal and Great Bay regions of the state reference, as guidance for all potentially affected activities within said regions, the requirements of NH Laws of 2016 Chapter 195:1 III (SB 452).

CHAPTER 235 FEDERAL AND STATE HIGHWAY AID

235:14 Application for State Aid; Compliance With Certain Standards. –
I. A city or town may apply to the commissioner of transportation for state aid on or before the first day of May in each year in the manner prescribed by the commissioner. The application shall state that such city or town has raised, appropriated, or set aside its contribution required for state aid.
II. The commissioner of transportation shall require that the highway design be in compliance with standards set forth in department of transportation manuals relating to bridge and highway construction and may adopt such manuals by reference.
III. The commissioner of transportation shall require that projects and actions in the coastal and Great Bay regions of the state reference, as guidance for all potentially affected activities within said regions, the requirements of NH Laws of 2016 Chapter 195:1 III (SB 452).

235:34 State Contribution to Damage Losses. – Any city, town or unincorporated place which suffers damage to its highways through disaster, including the effects of storm surge, which is estimated to exceed 1/8 of one percent of its assessed valuation shall be entitled to aid in the repair of such damage. The commissioner shall be notified of such damage and, after an investigation, shall estimate the amount of aid to which the city, town or unincorporated place is entitled. The commissioner shall survey the damaged highways and prepare an estimate of cost for rehabilitation of these highways, notifying the towns of the proportionate share which the state will contribute and the estimated amount of aid available. Aid to any city, town or unincorporated place shall be computed on that amount which is in excess of an amount equal to 1/8 of one percent of its assessed valuation and shall not exceed 75% of the cost of the damage in excess of this amount. Nothing in this section shall prohibit the city, town or unincorporated place from making such emergency repairs as are deemed necessary for public convenience; and such sum expended shall be considered part of the town's contribution.
CHAPTER 236 HIGHWAY REGULATION, PROTECTION AND CONTROL REGULATIONS

236:13 Driveways and Other Accesses to the Public Way. –

I. It shall be unlawful to construct, or alter in any way that substantially affects the size or grade of, any driveway, entrance, exit, or approach within the limits of the right-of-way of any class I or class III highway or the state-maintained portion of a class II highway that does not conform to the terms and specifications of a written permit issued by the commissioner of transportation.

II. Pursuant to this section, a written construction permit application must be obtained from and filed with the department of transportation by any abutter affected by the provisions of paragraph I. Before any construction or alteration work is commenced, said permit application shall have been reviewed, and a construction permit issued by said department. Said permit shall:

(a) Describe the location of the driveway, entrance, exit, or approach. The location shall be selected to most adequately protect the safety of the traveling public.

(b) Describe any drainage structures, traffic control devices, and channelization islands to be installed by the abutter.

(c) Establish grades that adequately protect and promote highway drainage and permit a safe and controlled approach to the highway in all seasons of the year.

(d) Include any other terms and specifications necessary for the safety of the traveling public.

(e) Describe the impacts of the requirements of NH Laws of 2016 Chapter 195:1 III (SB 452) for construction or alteration work undertaken in the coastal and Great Bay regions of the state.

III. For access to a proposed commercial or industrial enterprise, or to a subdivision, all of which for the purposes of this section shall be considered a single parcel of land, even though acquired by more than one conveyance or held nominally by more than one owner:

(a) Said permit application shall be accompanied by engineering drawings showing information as set forth in paragraph II.

(b) Unless all season safe sight distance of 400 feet in both directions along the highway can be obtained, the commissioner shall not permit more than one access to a single parcel of land, and this access shall be at that location which the commissioner determines to be safest. The commissioner shall not give final approval for use of any additional access until it has been proven to him that the 400-foot all season safe sight distance has been provided.

(c) For the purposes of this section, all season safe sight distance is defined as a line which encounters no visual obstruction between 2 points, each at a height of 3 feet 9 inches above the pavement, and so located as to represent the critical line of sight between the operator of a vehicle using the access and the operator of a vehicle approaching from either direction.

IV. No construction permit shall allow:

(a) A driveway, entrance, exit, or approach to be constructed more than 50 feet in width, except that a driveway, entrance, exit, or approach may be flared beyond a width of 50 feet at its junction with the highway to accommodate the turning radius of vehicles expected to use the particular driveway, entrance, exit or approach.

(b) More than 2 driveways, entrances, exits or approaches from any one highway to any one parcel of land unless the frontage along that highway exceeds 500 feet.

V. The same powers concerning highways under their jurisdiction as are conferred upon the commissioner of transportation by paragraphs I, II, III, and IV shall be conferred upon the planning board or governing body in cities and towns in which the planning board or governing body has been granted the power to regulate the grading and improvement of streets within a subdivision as provided in RSA 674:35, and they shall adopt such regulations as are necessary to carry out the provisions of this section. Such regulations may delegate administrative duties, including actual issuance of permits, to a highway agent, board of selectmen, or other qualified official or body. Such regulations, or any permit issued under them, may contain provisions governing the breach, removal, and reconstruction of stone walls or fences within, or at the boundary of, the public right of way, and any landowner or landowner's agent altering a boundary in accordance with such provisions shall be deemed to be acting under a mutual agreement with the city or town pursuant to RSA 472:6, III(a).

VI. The commissioner of transportation or planning board shall retain continuing jurisdiction over the adequacy and safety of every existing driveway, entrance, exit, and approach to a highway, whether or not such access was constructed or installed pursuant to a permit under this section, and, unless the access is a public highway,
the owners of property to which the access is appurtenant shall have continuing responsibility for the adequacy of the access and any grades, culverts, or other structures pertaining to such access, whether or not located within the public right of way. If any such access is or becomes a potential threat to the integrity of the highway or its surface, ditches, embankments, bridges, or other structures, or a hazard to the safety of the traveling public, by reason of siltation, flooding, erosion, frost action, vegetative growth, improper grade, or the failure of any culvert, traffic control device, drainage structure, or any other feature, the commissioner of transportation or planning board or their designee may issue an order to the landowner or other party responsible for such access to repair or remove such hazardous condition and to obtain any and all permits required therefor. The order shall describe the hazard, prescribe what corrective action or alteration in the location or configuration of such access shall be required, and set a reasonable time within which the action shall be completed. Such an order shall be sent by certified mail, and shall be enforceable to the same extent as a permit issued under this section. If the order is not complied with within the time prescribed, the commissioner or planning board or their designee may cause to be taken whatever action is necessary to protect the highway and the traveling public, and the owner or other responsible party shall be civilly liable to the state or municipality for its costs in taking such action.

CHAPTER 240 STATE 10-YEAR TRANSPORTATION IMPROVEMENT PROGRAM

240:3 Implementation of Plan. –

I. The department of transportation shall be responsive to requests for information relative to the plan.

II. The plan shall include a list of projects intended to be under construction in the next 10 years with dates and costs of construction.

III. Preliminary studies, design, and right of way funding for long term projects that have been approved by the Governor’s Advisory Commission on Intermodal Transportation (GACIT) and the department of transportation shall be included in the plan.

IV. The governor shall transmit the plan to the general court by January 15 of each even-numbered year. Projects listed in the plan shall be listed by the year the funds are to be expended and the 10 years of the plan shall be financially constrained.

V. Projects listed in the plan, except projects which are solely for infrastructure preservation or which stem from statewide transportation programs included in the plan, shall be prioritized based on a department of transportation methodology that examines the certainty of a project relative to its scope, cost, constructability, permitability, and public support, provided that the project has the following:
   (a) Preliminary design.
   (b) Environmental evaluation.
   (c) A public participation process.
   (d) Available and adequate funding.

VI. The following shall be considered for any project proposed for the plan:
   (a) Safety.
   (b) Multimodalism.
   (c) Land use.
   (d) Infrastructure preservation.
   (e) Overall corridor improvement.
   (f) For any project located in the coastal and Great Bay regions of the state, the project shall reference, as guidance for all potentially affected activities in said regions, the requirements of the NH Laws of 2016 Chapter 195:1 III (SB 452).

VII. Every 2 years, the department of transportation shall propose to the general court a list of projects to be removed from the 10-year plan if the department determines that any project:
   (a) Has significantly changed in scope; or
   (b) Is no longer financially or environmentally feasible; or
   (c) Lacks the necessary permits; or
   (d) For other reasons is unnecessary or unlikely to proceed.

VIII. Inflation shall be included in the costs calculated in the 10-year plan and shall also be included in calculating the necessary revenues.
IX. The department of transportation shall meet at least semi-annually with the GACIT.

X. The GACIT shall review:
   (a) Department of transportation financial status and issues.
   (b) The status and issues of transportation projects.
   (c) Other ongoing initiatives and issues.

XI. The GACIT shall provide the first statewide review of the plan as drafted by the department of transportation with input from the regional planning commissions.

Explanation: Matter added to current language appears *red, in bold, italics.*
Matter removed from current language appears [*red, in brackets and struckthrough.*]
Matter which is not changed from current language appears in regular type.
CHAPTER Tra 500 CONSTRUCTION AID AND RELOCATION SERVICES

Tra 501.04 Bridge Project Design Criteria
Tra 501.10 Design and Review; Municipally-Managed Projects
Tra 502.04 Highway Project Design Criteria
Tra 502.09 Design and Review; Municipally-Managed Projects
Bridge Project Design Criteria.

(a) Bridge projects constructed with state bridge aid shall be designed in accordance with the following design standards and manuals:

5. AASHTO Policy on Geometric Design of Highways and Streets (2011, 6th Edition);
6. Federal Highway Administration Manual on Uniform Traffic Control Devices, as adopted by the commissioner as a policy for traffic control standards (2009-2015 and subsequent revisions);
8. New Hampshire Department of Transportation (NHDOT) Standard Specifications for Road and Bridge Construction, 2010-2016 Edition;
9. New Hampshire Department of Transportation (NHDOT) Highway Design Manual (1999); and;
10. New Hampshire Department of Transportation (NHDOT) Bridge Design Manual (January 2015 – v 2.0);

(b) Bridge projects located in the coastal and Great Bay regions of the state shall reference, as guidance for all potentially affected activities in said regions, the requirements of the NH Laws of 2016 Chapter 195:1 III (SB 452).

(c) Upon written application of a municipality, the department shall waive any of the minimum design standards:

1. Unless it determines that granting the requested waiver would result in:
   a. An imminent or substantial threat to human health, public safety, or the environment; or
   b. The design or construction of a bridge structure that has a carrying capacity of less than:
      1. 15 tons for a rehabilitated bridge; or
      2. The legal load permitted by RSA 266:18-b for a new bridge; and
2. If the municipality has accepted, in writing, responsibility for construction that does not meet the waived minimum design standards.

Design and Review; Municipally-Managed Projects.

(a) Design of a municipally-managed project may be performed by municipal staff, or by a consultant, provided the designer is a licensed professional engineer registered in the applicable branch classification, including, but not limited to, requiring a structural engineer for bridge design.

(b) The department shall notify the municipality in writing if it determines that a proposed project is:

1. Simple in its scope, including, but not limited to, the resurfacing of a road or the replacement of a culvert, a municipality shall not be required to provide to the department an engineering study, preliminary plans, and final plans for the proposed project; or
2. More complex than the type of project described in (1) above, including, but not limited to, the reconstruction of a road, the widening of a road, the rebuilding of an intersection, or the addition of turning lanes, a municipality shall provide an engineering study, preliminary plans, and final plans for the proposed project to the department for review.

(c) The engineering study shall contain the following elements:
(1) A description of existing conditions, including:
   a. Description of the existing bridge and roadway;
   b. Length and width of existing structures;
   c. Type of bridge superstructure and substructure;
   d. Alignment of the approach roadway; and
   e. Any significant geometric or topographical conditions;
(2) A list of the relevant design criteria and manuals to be used, including, but not limited to:
   a. Bridge loading; and
   b. Design speed;
(3) A description of the methodology and reasoning used to develop the proposed roadway alignment, including:
   a. Horizontal and vertical curves;
   b. Travel way and shoulder widths;
   c. Effects upon environmentally sensitive areas, such as wetlands;
   d. Effects upon utilities;
   e. Effects upon any existing structures; and
   f. Effects upon private property;
(4) A description of the methodology and reasoning used to develop the proposed bridge type, including:
   a. A narrative comparison of the bridge types studied;
   b. A plan of the recommended bridge type, in plan, elevation and typical section, portraying:
      1. Components of the superstructure;
      2. Components of the substructure;
      3. Materials to be used in construction;
      4. Beam spacing; and
      5. Dimensions of pavement and curbs;
(5) The number and content of any boring logs taken, if deemed necessary by the responsible professional engineer, to present a reasonably accurate picture of subsurface conditions at the site;
(6) A description of the methodology and reasoning used to present the hydrologic and hydraulic parameters present at the site, including:
   a. Drainage area;
   b. Design flood event and volume;
   c. Flood velocity; and
   d. Elevations of drainage area;
(7) An itemized cost estimate for the proposed bridge type and roadway alignment, consistent with the standard specifications, item names, and definitions published in the New Hampshire Department of Transportation Standard Specifications for Road and Bridge Construction (2006);
(8) A description of the environmental resources that may be affected by each of the alternatives considered, including:
   a. Natural resources protected by state or federal environmental protection laws; and
   b. Cultural, historical, social, and economic resources protected by state or federal laws;
(9) When located in the coastal and Great Bay regions of the state, a description of the best available data used for projected storm surge, sea-level rise, and precipitation necessary to prepare for flood risks, consistent with the requirements of the NH Laws of 2016 Chapter 195:1 III (SB 452).
(10) A description of meeting(s) held with the New Hampshire division of historical resources in order to identify potential historical or archeological concerns that should be investigated to determine the possible impact of the project on cultural resources; and
(1011) A description of how traffic control and constructability issues will be addressed during construction.

(d) The preliminary plans shall contain the following elements:
   (1) A location plan, on a minimum scale of one inch equals one mile;
   (2) A general plan, depicting the elevation of the bridge structure;
   (3) A cross section of the approach roadway adjacent to the bridge;
   (4) A cross section of any roadway, water course, or other area spanned by the bridge;
   (5) A cross section of the bridge structure;
   (6) General notes, depicting:
      a. Design loading;
      b. Foundation type;
      c. Allowable foundation loads;
      d. Minimum frost cover;
      e. Superstructure type;
      f. Seismic design calculations; and
      g. Any other condition that, in the opinion of the presenting engineer, is worthy of note to the reviewing engineer;
   (7) Hydrologic and hydraulic data, including drainage area and design taking into account flood volume, velocity, and elevation;
   (8) Existing and proposed roadway layout plan;
   (9) Profiles of all roadways affected by the project;
   (10) Critical Cross section;
   (11) Boring logs and locations, if available;
   (12) A comparison of existing and proposed channel contours, including proposed channel and slope protection; and
   (13) Engineer’s estimate of cost of construction for the complete proposed project.

(e) The department shall review the engineering study and preliminary plans. Following receipt of the department’s comments on the engineering study and preliminary plans, the municipality shall submit final design plans and an updated cost estimate to the department for review and approval. After approval of the final design plans and cost estimate by the department, the municipality shall prepare contract plans, specifications, and a contract proposal.

(f) Contract plans, specifications, and proposals shall bear the licensed professional engineer stamp of the professional engineer who prepared the plans and contract proposal, or under whose direct supervisory authority the plans and contract proposal were prepared. Before finalized plans and contract proposals are submitted, it shall be independently checked in detail by a structural and highway designer, other than the original designer, and reviewed by the consultant’s supervising engineer charged with responsibility for the project.

Tra 502.04 Highway Project Design Criteria.
(a) Highway projects constructed with state highway aid shall be designed in accordance with the following design standards and manuals:
   (2) AASHTO Policy on Geometric Design of Highways and Streets (2011, 6th Edition);
   (3) Federal Highway Administration Manual on Uniform Traffic Control Devices, as adopted by the commissioner as a policy for traffic control standards (2009 and subsequent revisions);
   (5) New Hampshire Department of Transportation (NHDOT) Standard Specifications for Road and Bridge Construction, 2010 Edition; and
(b) Highway projects located in the coastal and Great Bay regions of the state shall reference, as
guidance for all potentially affected activities in said regions, the requirements of the NH Laws
of 2016 Chapter 195:1 III (SB 452).

(bc) Upon written application of a municipality, the department shall waive any of the minimum design
standards relating to municipal highways affected by the project:

1. Unless it determines that the requested waiver, if granted, would result in an imminent or
   substantial threat to human health, public safety, or the environment; and
2. If the municipality has accepted, in writing, responsibility for construction that does not
   meet the waived minimum design standards.

Tra 502.09 Design and Review; Municipally-Managed Projects.

(a) Design of a municipally-managed project may be performed by a consultant, provided the
consultant is qualified under RSA 21-I:22 and listed by the department in accordance with the
qualifications-based selection procedures.

(b) If the department determines that a proposed project is:

1. Simple in its scope, including, but not limited to, the resurfacing of a road or the
   replacement of a culvert, a municipality shall not be required to provide to the
   department an engineering study, preliminary plans, and final plans for the proposed
   project; or
2. More complex that the type of project described in (1) above, including, but not limited to
   the reconstruction of a road, the widening of a road, the rebuilding of an intersection, or
   the addition of turning lanes, a municipality shall provide an engineering study,
   preliminary plans, and final plans for the proposed project to the department for review.

(c) The engineering study shall contain the following elements:

1. A description of existing conditions, including:
   a. Geometry and cross section of the existing highway;
   b. Alignment of any intersections on the highway; and
   c. Any significant geometric or topographical conditions;
2. A list of the relevant design criteria and manuals to be used;
3. A description of the methodology and reasoning used to develop alternative alignments or
   treatments for the proposed highway improvement, including:
   a. Horizontal and vertical curves;
   b. Travel way and shoulder widths;
   c. Effects upon environmentally sensitive areas, such as wetlands;
   d. Effects upon utilities;
   e. Effects upon any existing structures;
   f. Effects upon private property; and
   g. The recommendation of the responsible professional engineer as to which
   alternative alignment or treatment should be advanced;
4. The number and content of any boring logs taken, if deemed necessary by the responsible
   professional engineer, to present a reasonably accurate picture of subsurface conditions
   at the site;
5. A description of the drainage issues and methodology of addressing the drainage issues
   present at the site;
6. An itemized cost estimate for the proposed highway construction or reconstruction,
   consistent with the standard specifications, item names, and definitions published in the
   New Hampshire Department of Transportation Standard Specifications for Road and
   Bridge Construction (2010);
7. A description of the environmental resources that may be affected by each of the
   alternatives considered, including:
   a. Natural resources protected by state or federal environmental protection laws; and
   b. Cultural, historical, social, and economic resources protected by state or federal
   laws; and
(8) When located in the coastal and Great Bay regions of the state, a description of the best available data used for projected storm surge, sea-level rise, and precipitation necessary to prepare for flood risks, consistent with the requirements of the NH Laws of 2016 Chapter 195:1 III (SB 452).

(89) A description of meeting(s) held with the New Hampshire division of historical resources in order to identify potential historical or archeological concerns that should be investigated to determine the possible impact of the project on cultural resources.

(d) The preliminary plans shall contain the following elements:
   (1) A front sheet with location map and layout;
   (2) A typical section of improvement;
   (3) General construction plans, including pavement marking, drainage, and utility relocations;
   (4) A signalization plan, if needed;
   (5) Documentation of the drainage design;
   (6) Erosion control measures;
   (7) Right-of-way acquisition plan sheets;
   (8) Profiles of all roadways affected by the project;
   (9) Boring locations and logs, if available;
   (10) A description and implementation plan for work and traffic control;
   (11) Cross-sections of the project; and
   (12) Any other condition that, in the opinion of the presenting engineer, is worthy of note to the reviewing engineer.

(e) The department shall review the engineering study and preliminary plans. Following receipt of the department’s comments on the engineering study and preliminary plans, the municipality shall submit final design plans and an updated cost estimate to the department for review and approval. After approval of the final design plans and cost estimate by the department, the municipality shall prepare contract plans, specifications, and a contract proposal.

(f) Contract plans, specifications, and proposals shall bear the licensed professional engineer stamp of the professional engineer who prepared the plans and contract proposal, or under whose direct supervisory authority the plans and contract proposal were prepared.

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Explanation: Matter added to current language appears red, in bold, italics. Matter removed from current language appears [red, in brackets and struckthrough]. Matter which is not changed from current language appears in regular type.