#### TOWN OF STRONG STREET STANDARDS ORDINANCE

#### SECTION I GENERAL

#### A. TITLE

This ordinance shall be known and cited as the Street Standards Ordinance of the Town of Strong, Maine, and will be referred to as "this Ordinance."

#### **B. AUTHORITY**

This Ordinance is adopted pursuant to the enabling provisions of Article VIII, part 2, Section 1 of the Maine Constitution, the provisions of Title 30-A, MRSA Section 3001 (Home Rule), the State's Growth Management Law, Title 30-A, MRSA, Sections 4311 et. seq.

#### C. <u>PURPOSES</u>

The purposes of this ordinance are:

- 1. To implement the provisions of the Town's Comprehensive Plan.
- 2. To promote the health, safety, and general welfare of the residents of the community.
- 3. To promote traffic safety.
- 4. To conserve natural resources.
- 5. To provide safety from fire and other elements.

#### D. APPLICABILITY

This ordinance shall apply to the construction of all new streets within the Town of Strong.

#### E. CONFLICTS WITH OTHER ORDINANCES

Whenever a provision of this Ordinance conflicts with or is inconsistent with another provision of this Ordinance or of any other ordinance, regulation or statute, the more restrictive provision shall control.

#### F. VALIDITY AND SEVERABILITY

Should any section or provision of this Ordinance be declared by the courts to be invalid, such decision shall not invalidate any other section or provision of the ordinance.

#### G. EFFECTIVE DATE

The effective date of this Ordinance shall be the date of adoption by the legislative body.

#### H. AMENDMENTS

This ordinance may be amended by a majority vote of the Legislative body. Amendments may be initiated by a majority vote of the Board of Selectmen or the Planning Board or on petition of 75 registered voters. The Board of Selectmen or the Planning Board shall conduct a public hearing on any proposed amendment. Notification of the hearing shall be posted and advertised in a newspaper of general circulation in the municipality at least seven (7) days prior to the hearing.

#### I. <u>ENFORCEMENT</u>

The Code Enforcement Officer appointed by the Board of Selectmen shall enforce this Ordinance.

#### J. APPEALS

Requests for administrative appeals and variance appeals shall be submitted to the Town of Strong Board of Appeals in accordance with M.S.A. 30-A § 2691-3. Any person aggrieved by the action of the Road Foreman, Planning Board, or the Code Enforcement Officer in the administration or enforcement of this Ordinance may appeal to the Board of Appeals by filing a written notice of appeal within forty-five (45) days after receipt of notification by the municipality.

#### SECTION II PERFORMANCE STANDARDS

#### A. GENERAL

No street or way shall be laid out and accepted as a public street or way by the Town of Strong except in accordance with the provisions of this Ordinance.

#### B. DEFINITIONS

Minor Streets: Rural or local roads, providing access to abutting properties for residential or commercial use.

Collector Streets: Feeders of traffic from minor streets to highways or arterial roads.

Major Roads: Arterial ways whose purpose is to serve heavy traffic flows and as a route for traffic between and through towns.

#### C. <u>ACCEPTANCE OF STREETS AND WAYS</u>

A street or way constructed on private lands by the owner thereof shall be laid out and accepted as a public street or way by the Town only upon the following conditions:

- 1. Underground utilities shall be located so as not to interfere with the Town's highway drainage facilities, including but not limited to, culverts, catch basins, under drainage interceptors, ditches, swales, etc. and the maintenance thereof by the Town.
- 2. The Town may contract with the owner for performance of certain corrections or work within twelve (12) months after acceptance of the way. Posting of a bond shall be part of the agreement. Street acceptance will allow financing by lot purchasers, and the agreement will allow review of the street construction after it has wintered over. The owner may be required to apply a second asphalt treatment the summer after acceptance or to reimburse the Town for same.
- 3. The owner or developer shall present the following materials when applying for acceptance of their street by the Town (submission to the Planning Board when part of a proposed subdivision): a plan, plot plan, profile, cross-sections, and test-pit findings.
  - a. A plan and a plot plan drawn, when practicable, to a scale of forty (40') feet to one (1") inch, and to be on one or more sheets of paper not exceeding

twenty-four (24") inches by thirty-six (36") inches in size. Said plot plan shall show the north point, the area of all lots, the length of all lot lines, the locations and ownership of all adjoining subdivisions and adjacent acreage, passageways, street lines, buildings, boundary monuments, waterways, topography, at not greater than six (6') foot intervals, all angles necessary for the plotting of said street and lots and their reproduction on the ground, the distance to the nearest established street line, and any buildings abutting on said street or way, together with the stations of their said lines.

- b. A profile of said street or way drawn to a longitudinal scale of forty (40') feet to one (1") inch and a vertical scale of forty (40') feet to one (1") inch. Said profile shall show the profile of the sidelines and centerlines of said street or way, and the proposed grades thereof. Any buildings abutting on said street or way shall be shown on said profile.
- c. A cross-section of said street or way drawn to a horizontal scale of five (5') feet to one (1") inch, and a vertical scale of one (1') foot to one (1") inch.
- d. Test-pits shall be dug in the road right-of-way every one hundred fifty (150") feet, or less as topographical indicators dictate. Results to a depth of five (5') feet shall be submitted, and incorporated in the profiles and cross-sections.

#### 4. Required Standards

- a. The following are required improvements and shall be installed at the expense of the developer: monuments, streets, sidewalks, street signs, streetlights, curbs, gutters, water mains, sanitary sewers, storm drains, and fire hydrants, except where the Board of Selectmen may waive or vary such improvements,
- b. Required improvements shall be installed in conformance with the provisions of this Ordinance subject to the approval of the Road Foreman and a performance bond shall be posted prior to acceptance of the improvements if not constructed by Town personnel.
- c. Monuments shall be six (6") inches square by three (3') feet in length, stone or concrete with a one (1") inch diameter metal pipe at least two (2') feet long set in the center, located in the ground at final grade level and indicated on the final plan. Permanent monuments shall be set at all street intersections and points of curve.

#### 5. Design Standards

Highway Type				
Standard	Minor	Collector	Major	
Pavement	Asphalt	Bit. Con.	Bit. Con	
Pavement Width	20'	22'	24'	

Pavement Width to Curb	28'	36'	42'
Shoulder Width	4'	6'	8'
Design Speed	25 mph	45 mph rural	30-45 mph
		25 mph local	
Minimum Right-of way	50'	60'	80'
Maximum Grade	10 pct	6 pct	4 pct
Minimum Grade	.5 %	.5%	.5 %
Sight Distance	200'	300'	400'

Maximum slope either side of the right-of-way is to be 2:1

Dead end streets: A "T" or hammer head turnaround shall be provided. The turnaround shall be centered with-in the right-of-way and shall be designed and constructed to the same specifications as the street and no less than forty (40') feet in length (perpendicular length).

#### D. Planning

- 1. Streets shall be suitably located to accommodate the prospective traffic and to afford satisfactory access for emergency apparatus, snow removal and road maintenance equipment.
- 2. The arrangements, width and grade of all streets shall be considered in relation to existing and planned streets, topographic conditions, public convenience and safety, and in their appropriate relation to proposed land uses.
- 3. Local streets shall be planned so that whenever possible, their use by through traffic will be discouraged.
- 4. Grades of streets shall conform as closely as possible to original topography and shall be arranged so that building sites are at or above street grade. Steep grades and sharp curves shall be avoided.
- 5. Where a tract is subdivided into lots greater than five (5) acres the Planning Board may require that streets and lots be laid out to permit further resubdivision.
- 6. Intersections of major streets by other streets shall be held to a minimum and shall be at least eight hundred (800') feet apart, if possible. Cross street intersections shall be avoided, except at important traffic intersections. A distance of at least two hundred and fifty (250') feet shall be maintained between offset intersections. Within one hundred (100') feet of an intersection, right-of-way streets shall be at right angles.
- 7. Half streets and privately owned reserve strips controlling access to streets or adjacent property shall be prohibited.

- 8. Arrangement of streets shall provide for continuation of existing streets between adjacent properties where necessary for convenient movements of traffic, fire protection or efficient provisions of utilities.
- 9. If adjacent property is undeveloped and the street must be a dead-end temporarily, right-of-way and improvements shall be extended to the property line. A temporary circular turn-around shall be provided on all temporary dead-end streets, with the notation on the plat that land outside the street right-of way shall revert to abutting lots whenever the street is continued.

#### E. Construction Standards

The following specifications shall constitute the minimum standards for construction and improvement of streets:

<u>Sub-Grade:</u> All streets shall be sound, firm land, free from excessive moisture, drainable to a public runoff, rough graded, and compacted the full width of the right-of-way.

<u>Sub-Base Course</u>: All streets shall have a sub-base course of at least twelve (12") inches of gravel in sandy soil and at least eighteen (18") inches of gravel in clay soil.

Roads with a clay base shall have under drain put in at a minimum of three and one-half (31/2") inches deep on each side of roadway.

	Major	Collector	Minor
Shaping Course	4" Crushed Gravel	4" Crushed Gravel	4" Crushed Gravel
Surface Course	4" Bituminous	4" Bituminous	3" Bituminous
	Concrete	Concrete	Concrete

#### F. Street Material Standards

The following material standards are to be utilized in the construction of street improvements:

- 1. Bituminous Concrete (Hot Mix, Hot Top): To meet specifications as set forth in the latest revision of the Maine Department of Transportation Construction Manual.
- 2. Crushed Gravel: Crusher run gravel of clean, hard durable particles of washed crushed gravel of which one-hundred (100%) percent will pass a one and one-half (11/2") inch round screen opening and of which sixty (60%) to seventy (70%) percent will pass a three-fourth (3/4") inch round opening, however, not more than twenty-five (25%) percent shall pass a number forty (#40) square screen opening.

 Gravel: Gravel shall consist of material free from silt, loam or clay, obtained from an approved source and meeting the following requirements:

Not less than forty (40%) percent shall be retained by a number four (#4) sieve. The stone portion of the gravel shall be uniformly graded from coarse to fine and the maximum size particles shall not exceed three (3") inches in diameter.

#### G. Application Standards

- 1. Bituminous concrete will be applied in accordance with procedures outlined in the latest revision of the Maine Department of Transportation Construction Manual.
- 2. No bituminous material shall be applied when the atmospheric temperature is fifty (50°) degrees Fahrenheit or below.

#### H. Sidewalks

#### 1. Design Standards

- a. Minimum width of sidewalks in residential areas shall be five (5') feet, and in commercial or industrial areas five (5') feet.
- b. Sidewalks shall generally be of bituminous concrete at least two (2") inches thick, except through driveways and other areas subject to vehicular traffic where they shall be at least four (4") inches thick, laid on a compacted bed of gravel at least six (6") inches deep. Cement may be used at the discretion of the developer with the approval of the Road Foreman.
- c. Where sidewalks abut the traveled area of streets, a separate curb edge will be provided.

#### 2. Planning Guidelines

- Sidewalks shall be suitably located to accommodate prospective pedestrian traffic and to afford satisfactory access to snow removal equipment and the handicapped.
- b. Sidewalks shall be arranged as to cause no undue hardship to adjoining properties, and shall be coordinated so as to compose a convenient system.

c. Sidewalks shall be built where there are one-hundred (100) pedestrians per day and one-hundred (100) vehicles per hour averaging over twenty-five (25) miles per hour or where there are one hundred fifty (150) pedestrians per day and thirty (30) vehicles per hour averaging over twenty-five (25) miles per hour.

#### 3. Construction Standards

#### a. Surface Dimensions and Material:

Sidewalks servicing residential areas shall consist of a bituminous concrete surface two (2') inches deep and five (5') feet wide, except at driveways where the depth shall be increased to four (4") inches. The width of sidewalks in commercial areas shall be five (5') feet.

- b. All sidewalk bases shall consist of six (6") inches of compacted gravel.
- c. All sidewalks shall comply with standards regarding the Americans with Disability Act (ADA) Code of Federal Regulations. 28 CFR Part 36.

#### 4. Material Standards

- a. Gravel used shall meet the same specifications as that used for streets as specified in 10-1.4(D).
- b. Bituminous concrete surfacing shall meet the specifications as specified by the State of Maine and be applied in accordance with the latest revision of the Maine Department of Transportation Construction Manual.
- c. Concrete surfacing shall meet specifications as provided by the Road Foreman.

#### 5. Backfilling

This item shall consist of backfilling with suitable materials, topped with good loam to a rolled depth of four (4") inches to the property line on one side and the top of the curb on the other. All surplus material shall be removed and the site left neat and presentable to the satisfaction of the Road Foreman and the abutting property owners.

#### I. Street Lights.

If approved by the Board of Selectmen as necessary for the public safety, the poles, brackets, and lights shall be of the size, type and location approved by the local power company and the Road Foreman.

#### J. Curbing.

- 1. General This item shall consist of suitable base granite stones, bituminous concrete or cement concrete, set in conformity with lines and grades indicated in the accompanying drawings. Granite curbing shall be utilized in high [lots less than one hundred fifty (150') feet footage] density residential, commercial and industrial areas. Bituminous granite or concrete curbing shall be used in areas containing greater than one hundred fifty (150') foot lot frontages.
- 2. Base Course This item shall be six (6") inches of sub-base gravel and shall be compacted to the specified depth below the finish grade of the curb.
- 3. Granite Curb The granite stones shall be hard, sound, durable quarried granite thoroughly cleaned of any iron or rust particles. The individual stones shall have a minimum depth of seventeen (17") inches and a maximum of twenty-five (25") inches. The top thickness shall not be less than five (5") inches or more than eight (8") inches. It must be of uniform thickness in any continuous section. The overall thickness shall have a minimum of six (6") inches and a maximum of nine (9") inches. The maximum length shall be six (6') feet excepting for members placed over catch basins or in curved sections. Curbstones set a radius of one hundred sixty (160') feet or less shall be cut to the curb required. Individual stones shall have a top surface sawed to an approximately true plane. The front and back arris lines shall be pitched straight and true. The front face shall be roughly square to the plane of the top and shall be smooth quarry split, free from drill holes in the exposed surfaces with no projections greater than threequarters (3/4") of an inch or depressions greater than one-half (W) inch measured from the vertical plane through the top arris line for a minimum distance of eight (8") inches from the top. The remaining distance may show projections or depressions not exceeding one (1") inch. The ends of all stones shall be square to the above-described planes and so finished that when stones are placed close together end-to-end, no more than one-half (1/2") inch space shall show in the top or the exposed section of the face. The top three (3") inches of the back surface shall have no projection which will exceed a batter of four (4") inches in twelve (12") inches.
- 4. Bituminous Concrete Curb Bituminous concrete curbs shall be constructed in accordance with latest revision of the Maine Department of Transportation Construction Manual.
- 5. Backfilling This item shall consist of backfilling with suitable material, topped with good loam to a rolled depth of four (4") inches from the property line on one (1) side and to the top of the curb on the other. All surplus material shall be removed and the site left neat and presentable to the satisfaction of the Road Foreman and the abutting property owners.

#### K. Water Mains

Installation of water mains shall be in accordance with the specifications of the Strong Water District.

#### L. Storm Drainage

- 1. General This item shall consist of furnishing and laying any of the following types of pipe to a true grade line: vitrified clay Class Extra Strength; reinforced concrete; asphalt-coated and non-corrugated galvanized pipe; and HDPE (Plastic N-12) Cement Class.
- 2. Bridges All bridges, metal plate pipe, pipe arch, or arch culverts or retaining walls shall be submitted in plan and profile to the Road Foremen for approval.
- 3. Vitrified Clay Pipe This item shall consist of furnishing vitrified clay pipe extra strength, meeting the specifications for diameter of pipe required with a minimum of one (1) catch basin at twelve (12") inch, and main lines of fifteen (15") inch.
- 4. Reinforced Concrete Pipe This item consists of furnishing reinforced concrete pipe, meeting the specifications for the diameter of pipe required and in sections not less than three (3') feet nor more than eight (8') feet long, with the same minimum diameters as in vitrified clay pipe.
- 5. Asphalt-Coated and Non-Coated Corrugated Galvanized Pipe This item shall consist of furnishing asphalt-coated or non-coated corrugated galvanized pipe, meeting the Town's specifications for diameter or pipe required and in sections not over twenty (20') feet in length, and the same minimum diameters as in vitrified clay pipe.
- 6. Application for Pipe Installation This item shall apply to all types of pipe mentioned.
- a. Trenches. When the pipe is to be laid below the existing ground line, a trench shall be excavated to the required depth. Where rock is encountered, the trench shall be excavated eight (8") inches below the bottom of the pipe. This area shall be filled with sand or other suitable material, thoroughly tamped, and shaped.
- b. Infill Where pipe is to be placed in a fill section, the fill shall first be constructed and compacted to an elevation three (3') feet higher than the flow line of the pipe or one (1') foot over the top of the pipe, whichever is greater. Then the trench shall be excavated and the pipe laid and backfilled.
- c. Insufficient Foundation Whenever the natural foundation material is insufficient to safely support the structure and a deeper foundation cannot be obtained by excavating and replacing with approved material, then timber grillage work may be used to distribute the bearing area for the pipes on which shall be placed approved

material, thoroughly tamped, to give a depth of fill of eight (8") inches from the top of the timber grillage to the bottom of the pipe.

- d. Laying All pipe of the bell and spigot type shall be laid with the hub upgrade, spigot ends fully entered into the adjacent hub, and true to lines and grades. Pipe of asphalt-coated or non-coated corrugated galvanized iron shall be butted together and the sections jointed with a coupling band with the required number of bolts for the pipe diameter. Any pipe which is not laid true to alignment and grade shall not be accepted.
- e. Backfill The backfill shall be made in shallow layers [about twelve (12") inches] with an approved material, free from large stones, sods or other material which would prevent the backfill from being thoroughly compacted. Each layer shall be tamped thoroughly around and over the pipe. Tamping shall be done with mechanical tampers. No heavy equipment shall be moved over the pipe until a full compacted backfill of at least three (3') feet above the pipe has been placed. Pipes shall have at least four (4') feet cover to the finish grade. All backfill shall be of subbase gravel.
- 7. Catch Basins General This item shall include concrete, concrete block, reinforced concrete pipe, and asphalt-coated and non-coated corrugated galvanized catch basins with grates or drop inlets with covers. They shall be located at the curb line of the road surface, and at the grade line of the road. Catch basins shall he spaced not more than three hundred (300') feet apart on flat grades or at low points in the grade and up to one (1%) percent: from ore (1%) percent grade to eight (8%) percent grade they shall be spaced not more than two hundred (200') feet apart, from eight (8%) percent up they shall be spaced not more than one hundred fifty (150') feet apart, and located on each side of the street.
- 8. Concrete Catch Basins This item shall consist of the construction of catch basins of concrete with grating. The concrete shall be of three thousand (3,000) pounds, twenty-eight (28) day strength concrete.
- 9. Concrete Block Catch Basins This item shall consist of the construction of catch basins of concrete barrel and batter blocks with necessary concrete top and grade.
- 10. Reinforced Concrete Pipe Catch Basin This item shall consist of the construction of catch basins of reinforced concrete pipe with necessary concrete top and grate similar to the type used in the concrete and concrete block type catch basin.
- 11. Application for Catch Basins A pit shall be excavated to the depth of sixteen (16") inches below the invert of the lowest pipe. All excavated material shall be removed and disposed of.
- a. A concrete, or concrete segment base six (6") inches thick shall be placed in the bottom of the pit.

- b. The backfill shall be placed in layers not exceeding twelve (12") inches in thickness and shall be thoroughly compacted through the use of mechanical tampers.
- c. A concrete frame with a metal cascade grate shall be placed on the structure at the proper location and grade.

#### M. Fire Hydrants

Hydrants shall be of the size, type, and make specified by the Strong Water District.

### SECTION III ACCEPTANCE OF STREETS AND WAYS REQUIRED BY THE GENERALPUBLIC INTEREST

Notwithstanding the provisions of this Ordinance, the Town may at a regular Town Meeting, lay out and accept any street or way in the Town of Strong as a public street or way of said Town, the cost thereof to be borne by the Town, whenever the general public interest so requires.

# SECTION IV NO STREET OR WAY TO BE ACCEPTED UNTIL AFTER REPORT AND INSPECTION

No street or way shall be laid out and accepted by the Town of Strong until the Town Planning Board (regarding subdivisions) and/or the Road Foreman shall have made a careful investigation of said street or way and shall have reported to the Board of Selectmen or Town Meeting their recommendations with respect thereto.

Given under our hands this	day of	2015, Strong, Maine
		SELECTMEN, TOWN OF STRONG
		Milton Baston
Attest: A True Copy		James Burrill
Town Clerk		Michael Carleton
2015		Gerald Pond
		Joan Reed

## TOWN OF STRONG

# STREET STANDARDS ORDINANCE

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