

ROAD ORDINANCE

OF THE

TOWN OF WALES, MAINE

Final Draft: April 8, 2013
Adopted: June 8, 2013

**ARTICLE 1. PURPOSE, AUTHORITY, ADMINISTRATION, EFFECTIVE DATE,
REPEAL OF EXISTING ORDINANCE**

1.1 PURPOSE

The purpose of this ordinance is to establish minimum standards by which roads in the town are to be constructed. These standards are required to protect the safety, health, and welfare of the people of the town of Wales.

1.2 AUTHORITY

- A. This ordinance is adopted pursuant to Home Rule Powers as provided for in Article VIII-A of the Maine Constitution and Title 30-A, M.R.S.A., §3001.
- B. This ordinance shall be known and may be cited as “Road Ordinance of the Town of Wales, Maine.”

1.3 ADMINISTRATION AND ENFORCEMENT

The Planning Board of the town of Wales (hereinafter called the Board) and the Town of Wales Road Commissioner shall administer and enforce this ordinance.

1.4 APPLICABILITY

These standards shall apply to all roads, as defined, within the town of Wales.

1.5 EFFECTIVE DATE

The effective date of this ordinance shall be June 8, 2013, the date of the 2013 Wales Town Meeting.

1.6 REPEAL OF PRIOR ORDINANCES

This Ordinance shall repeal the ordinance entitled “Town of Wales Road Ordinance” adopted June 11, 2005 and any amendments made to that ordinance.

1.7 AMENDMENTS

This ordinance may be amended by a majority vote of the registered voters of the town of Wales at a regular or special town meeting.

1.8 SEVERABILITY

The invalidity of any provision of this ordinance shall not invalidate any other provision.

ARTICLE 2. DESIGN STANDARDS

2.1 ROAD DESIGN STANDARDS

- A. The type of road is as defined in the Town of Wales Definitions Ordinance. Roads shall meet the standards as listed in Table 1, Road Design Standards, and shall be in accordance with the Typical Cross Section appended to this ordinance:

Table 1: Road Design Standards

Item	Collector	Town Way	Private	Common Driveway
Right-of-Way Width (Minimum)	60'	60'	60'	60'
Pavement/Travel Way Width	20'	20'	20'	16'
Minimum Grade	0.5%	0.5%	0.5%	0.5%
Maximum Grade	8.0%	12.0%	12.0%	10.0%
Within 50' of Intersections	3.0%	3.0%	3.0%	3.0%
Minimum Angle of Intersection	as close to 90° as possible (no less than 60°)			
Width of Shoulder (Each Side)	3'	2'	2'	1'
Minimum Centerline Radius	200'	200'	200'	200'
Minimum Tangent Between Reverse Curves	200'	100'	100'	100'
Sub-base (meeting MDOT 703.06 Type D)*	18"	15"	12"	12"
Base (meeting MDOT 703.06 Type A)*	6"	6"	6"	Not Required
Base Pavement (Bituminous; After Compaction)* †	2-3"	2-3"	Not Required	Not Required
Wearing Course (Bituminous; After Compaction)* †	1¼"	1¼"	Not Required	Not Required
Minimum Crown	¼"/ft.	¼"/ft.	5/8"/ft.	5/8"/ft.
Minimum Radius of Right-of-Way at Intersection	10'			
Minimum Radius of Pavement at Intersection – 90'	25'	25'	25'	25'
Minimum Distance Between Intersections	300'	200'	200'	200'
Minimum Culvert Size ±	15"	12"	12"	12"
Minimum Cover Over Culverts	18"			

* Maine Department of Transportation specifications will be used to establish material quality specifications. These material thicknesses presume a suitable native soil below subgrade. Fine-grained soils having a California Bearing Ratio of less than fifteen (15) percent will generally require additional sub-base material.

† Thickness would be based on type of projected traffic/use and will be discussed with the Road Commissioner and based on the following pavement guidelines: Surface Pavement (Wearing Course) use 9.5mm pavement 1-1 ¼" in thickness; Intermediate Pavement (if used) 12.5mm pavement 1 ½–2" in thickness; Base Pavement use 2 ¼–3" in thickness (Max. Depth Base layer 3"). On all use a 50 gyration super pave mix.

± See 2.1, D

- B. Dead end streets shall be avoided whenever possible. When a dead end street is required by the constraints of the parcel, or when phasing of a subdivision results in a temporary dead end street, a turn-around for use of emergency and other vehicles shall be provided and the following minimum specifications be adhered to
 - 1. for a cul-de-sac the radius of the right-of-way shall be 65' while that of the travel way shall be 50' max with a 30' min (See Appendix A.)
 - 2. a hammerhead shall have a travel way width as per the class of road and a minimum length of each "leg" of 40'.
- C. All base and sub-base materials will be placed at the optimum moisture content to achieve the desired compaction. The maximum compacted thickness of any layer shall not exceed 12". Compact all base and sub-base material to at least 90% of the maximum density as determined in accordance with ASTM D698. Determine in place density using ASTM D1556 or D2022 or other method approved by the Board. The Board shall determine the frequency of in place testing required.
- D. All new culvert installations and replacements will utilize plastic culverts with a minimum 12" diameter and with a minimum length of 30 feet and a maximum length of 40 feet. A waiver may be obtained by the Road Commissioner where the installation of a 12" or larger culvert is not possible. While the minimum cover for culverts is as referenced in Table 1 by road type, 24" will be the accepted standard whenever possible. In extenuating circumstances, where even the referenced minimum is unattainable, a waiver may be granted by the Road Commissioner.

2.2 GRADE CHANGES

- A. For all road classifications, grade changes shall be accomplished by parabolic vertical curves of such design that a minimum sight distance of two hundred (200) feet is maintained. In no case shall vertical curves have lengths less than $K * A$, where A is the algebraic difference of the grades in percent, and K is defined in Table 2, Grade Changes, below.

Table 2: Grade Changes

Design Speed (MPH)	"K" for Crest Curves	"K" for Sag Curves
25	25	33
30	28	35
40	50	50
50	80	70
60	150	100

- B. All streets shall have adequate stormwater drainage facilities to prevent pavement flooding and side-slope erosion.
- C. Side slopes shall have a maximum grade of thirty-three (33) percent.

2.3 SIGHT DISTANCE

Sight distance shall be measured from the driver's seat of a vehicle that is ten (10) feet behind the curb or edge of the shoulder line with the height of the eye three and a half (3 1/2) feet above the pavement and the height of object four and a half (4 1/2) feet. The minimum sight distance shall be based on MDOT standards as listed in Table 3, MDOT Safe Stopping Distance.

Table 3: MDOT Safe Stopping Distance

MDOT SAFE STOPPING DISTANCE TABLE	
MPH	Distance in feet
30	250
35	305
40	360
45	425
50	495

2.4 SIGNAGE

- A. All roads shall be provided with traffic-control signs at the expense of the applicant/ developer. Signs establishing speed limits, stopping lines, yield locations, and other similar instructions shall be in conformance with the current MUTCD standards. Street- and road-name signs shall be MUTCD standards and retro reflective and be provided by the applicant and installed as directed by the Board of Selectmen/Road Commissioner.
- B. All applicable signage shall be installed prior to acceptance by the town.

2.5 OPENINGS/ENTRANCES TO EXISTING OR PLANNED PUBLIC WAYS

All proposed permanent roads shall be designed and constructed in accordance with this ordinance. An "Entrance Permit" or "Driveway Permit" from the Road Commissioner, or his/her authorized agent shall be required for any new road, driveway, access way, curb cut or other road/street opening, the purpose of which is to provide access to and from a town road or a proposed town road. The Road Commissioner, or his/her agent, shall specify culvert size, specify any special installation requirements, and locate points of safe access for the opening. The installation and cost of such opening (entrance) shall be the responsibility of the owner of the property to which access is provided. It is the responsibility of the owner to ensure that the entrance meets the standards established by the Town of Wales (based on MDOT standards) for the installation along with any additional requirements specified on the permit by the Road Commissioner. The Road Commissioner will inspect installations requiring culverts to ensure that the installation meets the permitted requirements. Installations not meeting the requirements must be brought into compliance before building permits or other construction will be permitted.

2.6 UNDERGROUND INSTALLATION OF UTILITIES

Any underground installation of utilities within five (5) years of building and paving or repaving of a town road shall be outside of the paved area whenever feasible. Where pavement cuts are made the entire rebuilding may be requested of the responsible party and a sharing of the costs negotiated. Plans will be reviewed and approved by the Road Commissioner. As in all underground installations, dig safe and ok-to-dig will be contacted and documented.

ARTICLE 3. GENERAL

3.1 COMMON DRIVEWAYS AND NON-CONFORMING COMMON DRIVEWAYS, PRIVATE ROADS AND WAYS

- A.** New Common Driveways: All lots, including the original lot, shall have a note attached to the deed recorded at the registry of deeds stating that it is the 1st, 2nd, or 3rd lot on that common drive. It will further state that should a 4th lot be created that will use that drive as it's point of access that the common driveway shall be upgraded to have the necessary improvements to meet private road standards completed as outlined in the design section (Article 2) of this ordinance before a building permit will be issued.
- B.** Existing non-conforming common drives and the lots accessed by those drives shall be grandfathered. However, a note will be recorded with the registry of deeds noting the lot number with reference to the common driveway and the provision that any additional division will require the improvements to bring it into compliance with the provisions of this ordinance.
- C.** Existing non-conforming private roads and ways shall be grandfathered. However, any additional development shall require the improvements to the private road or way to the property line(s) of said development.

3.2 ACCEPTANCE REQUIREMENTS

- A.** Any registered voter in the town of Wales may petition the town for acceptance of any road in the Growth Areas meeting the design standards for collector and town ways. Private roads in the Growth Areas that meet the applicable criteria may be considered for acceptance after they have been paved according to the town way road standard. Each petition shall be accompanied by a written certification signed by a State of Maine registered Professional Engineer at the expense of the applicant, certifying that the proposed street(s) meet or exceed the design and construction requirements of this Ordinance. "As Built" Plans shall be submitted to the Road Commissioner. Roads that do not meet the applicable criteria shall not be considered for acceptance.
- B.** An article to accept any road meeting the design standards may be included in the warrant for a regular town meeting, to be voted upon by the voters at said meeting.
- C.** A petition for inclusion in the warrant shall include all necessary deeds providing clear title to the town of Wales for the entire width and length of the right-of-way, as well as any necessary easements for drainage and slopes, such title to be effective immediately upon acceptance by the town.
- D.** The petitioner agrees to guarantee for two years following acceptance that the road was built in accordance with the construction standards of this ordinance and, after receiving written notice from the Planning Board, agrees to reimburse the Town for repairs resulting from any design or construction defects beyond the normal wear and tear from ordinary use. Layout plans, deeds shall be submitted and the Town can request independent testing be done at the owners expense. If any legal action is brought against the petitioner in the name of the Town in order to collect the costs for repairing the road, and the Town prevails, then the applicant shall be liable and responsible for the Town's legal fees and court costs and any other costs involved in bringing such suit or action.

3.3 SUBMISSIONS

An application for a road shall include the information required on the application form, and the road shall comply with the standards in Article 2, unless the information or standards are waived by the Board.

3.4 INSPECTIONS DURING CONSTRUCTION

The Road Commissioner, his agent, or an individual assigned by the Planning Board or the Board of Selectmen shall make periodic inspections of streets and roads during construction to insure that they are constructed in conformance with the standards of this ordinance. He/she shall report to the Planning Board on construction progress when requested

ARTICLE 4. WAIVERS AND APPEALS

4.1 WAIVERS

Where the Board makes written findings of fact that the developer will suffer an undue economic or other hardship if the requirements of this ordinance are strictly applied, it may waive the necessity for strict compliance with the requirements of this ordinance in order to provide relief from the hardship in question and to permit a more practical and economical development, provided, however, that the public health, safety, and welfare will not be compromised, and further provided that the waivers in questions will not have the effect of nullifying the intent of this ordinance or the Town of Wales Comprehensive Plan. The Board shall not waive any requirements of this ordinance for those roads proposed to be accepted by the town of Wales.

4.2 APPEALS

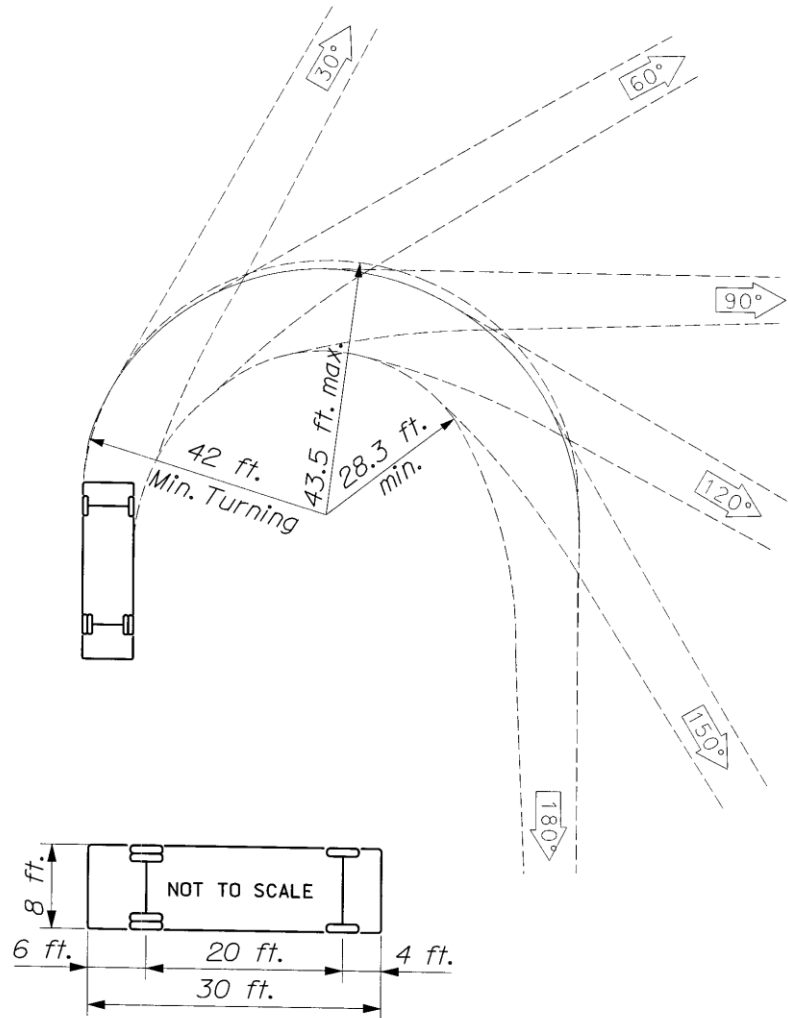
Appeals from any decision of the Board may be taken to the Board of Appeals by any aggrieved party within sixty (60) days of the decision of the Board.

ARTICLE 5. DEFINITIONS

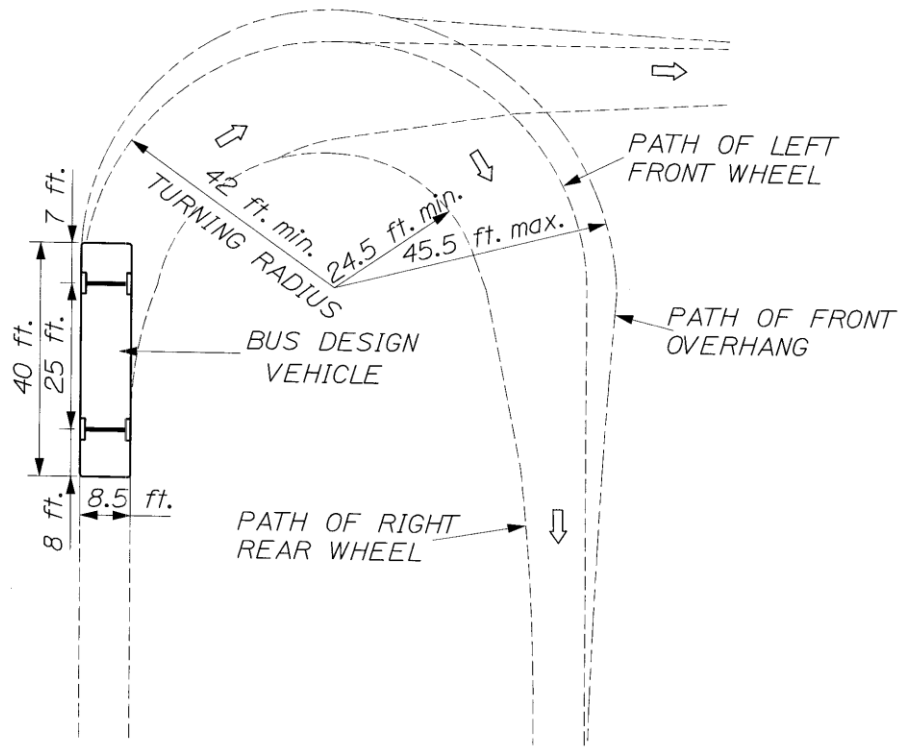
In general, words and terms used in this ordinance shall have their customary dictionary meanings. Certain words and terms used herein shall be as defined in the Town of Wales Definition Ordinance.

Adopted: June __, 2013

Road Ordinance of the Town of Wales
Appendix A:



MINIMUM TURNING PATH FOR
SU (SINGLE UNIT) TRUCK DESIGN VEHICLE
Exhibit 5



MINIMUM TURNING PATH FOR
CITY TRANSIT BUS DESIGN VEHICLE

Exhibit 4

<http://www.maine.gov/mdot/technicalpubs/hdg.htm>