



"...meeting community needs...enhancing quality of life."

August 2021

CITY OF APPLETON STANDARD STREET DESIGN GUIDELINES

I. NEW CONSTRUCTION or URBANIZATION.

Below are the general guidelines for new street construction. However, each facility must be looked at individually to review factors that should be considered such as parking needs, density of development, truck traffic, etc.

A. Base

1. Twelve inches compacted stone base over geogrid, installed to design subgrade profile.
2. Grade full right-of-way to design section.
3. Twelve-inch base installed at time of pavement if not previously graded.
4. Undercut for poor soil conditions.

B. Width (back of curb to back of curb)

Minor Residential: 29'

Residential: 31'

Parks and Schools (Adjacent to Entrance): 37'

Collectors: 37'

Arterials: Custom design lane widths ranging from 10-12 feet depending on traffic volume, truck traffic, speed, and complete streets consideration.

(See Narrow Street Parking Policy 6/16/93 for parking restrictions)

C. Permanent Surface

1. Minor Residential: Seven-inch plain concrete with curb
2. Residential: Seven-inch plain concrete with curb
3. Collector: Eight-inch doweled concrete with curb
4. Arterial / Truck Route: Eight-inch to Ten-inch doweled concrete with curb, depending on engineering considerations.
5. Urbanization (Minor residential/Residential): 3-¼ inch asphalt or seven-inch concrete with curb, depending on engineering considerations.
6. Urbanization (Collectors/Arterials): Eight-inch to Ten-inch doweled concrete with curb, depending on engineering considerations.

D. Miscellaneous

1. All existing gravel service walks and drives are replaced with concrete.
2. Backfill to edge of walk or slope to meet the proposed walk grade at the property line if there is not walk.

E. Standards for Horizontal Curvature

1. Residential - Table 1 gives the minimum curve radii for the various functional classifications. Minimum radii should be used only when the cost of realizing the higher standard is inconsistent with the benefit. Where physical restrictions cannot be overcome and it becomes necessary to introduce curvature or a lower standard than the design speed for the project, the design speed between successive curves shall not change by more than 10 mile-per-hour increments. Under no conditions shall a curve for a design speed lower than the design speed of the project be introduced at the end of a long tangent or at other locations where high approach speeds may be anticipated. Angle points less than one degree require no curve radius. A compound curve will not be permitted. A broken-back curve is two curves in the same direction joined by a short tangent. Broken-back curves are not permitted.

Table 1. Design Standards for Streets in Residential areas

Design Item	Local Streets (feet)	Collector Streets (feet)
Minimum CL radius of horizontal curves	180 ^a	280 ^a
Minimum Tangent between adjacent horizontal curves	100	100
Minimum Sight Distance	150	200

^a — may be larger, depending on terrain and available sight distance

2. Non- Residential – Custom design based on speed limit and traffic volumes.

II. RECONSTRUCTION (Total)

A. Base

1. Twelve-inch compacted stone over geogrid.
2. Undercut for poor soil conditions.

B. Width

1. Reduce width to new construction guidelines unless existing or increased width is justified.
2. See Narrow Street Parking Policy 6/16/93 for parking restrictions.

C. Permanent Surface

1. Minor Residential: 3-¼ inch asphalt with curb
2. Residential: 3-¼ inch asphalt with curb
3. Collector: Eight-inch doweled concrete with curb
4. Arterial / Truck Route: Eight-inch to Ten-inch doweled concrete with curb, depending on engineering considerations.

D. Miscellaneous

1. All existing service walks and driveways replaced in kind.
2. Backfill to edge of walk or variable to fit existing conditions where no walk.
3. Re-grade private property as required in the event of walk grade change.
4. Driveway aprons replaced with concrete.

III. RECONSTRUCTION (Partial)

A. Base

1. Replace base in kind as required.
2. Asphalt base for a greater load capacity.

B. Width

Use existing width.

C. Permanent Surface

1. Three-inch asphalt surface.
2. Salvage existing curb and gutter with minor replacement.

IV. BIKE LANES

Bike lanes shall be considered and designed in accordance with the City of Appleton's Complete Street Policy and City-Wide Bike Lane Plan.

V. COMPLETE STREETS

All streets, whether new or reconstructed, should adhere to the vision of the City of Appleton's Complete Streets Policy, where "*all streets are designed and maintained to be safe, accessible, convenient and comfortable for all transportation modes, ages and abilities at all times.*"